Men-at-Arms

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The Hussite Wars 1419-36

Stephen Turnbull • Illustrated by Angus McBride

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Dedication

For Helen Ainsley, with love and thanks for her support through a very difficult time

Author's Note

The first words of this book were written within the shadow of Rabi Castle in southern Bohemia, where the great Hussite leader Jan Zizka lost the sight from his second eye during the epic siege of 1420. I wish to thank the curators of such institutions throughout the Czech Republic, particularly the Hussite Museum in Tabor and the National Museum and Bethlem Chapel in Prague, for helping me put together this testimony to the Czech people's greatest medieval heroes, whose contribution to world military history may finally be recognized by a wider public. I also thank Martin Windrow for his invaluable support.

Artist's Note

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THE HUSSITE WARS 1419-36

PREFACE

THE HUSSITE WARS, although little known outside the borders of the modern Czech Republic where they were fought, represent an important stage of development in medieval military history. In terms of ideology alone they were fought for a religious principle that anticipated the Reformation by a century and a half, but from a military point of view the Hussite Wars were also ahead of their time. The Hussites' innovative use of artillery and their famous war wagons showed a new way of dealing with mounted knights, and foreshadowed the infantry revolution that was soon to have such an impact on medieval warfare.

Jan Zizka is represented in this bas-relief according to his traditional attributes: with one eye, fighting with a mace, and carrying a shield bearing the chalice device that became the badge of the Hussites. (From the door of the Zizka Memorial on Zitkov Hill, Prague)

CHRONOLOGY

1419	
30 July	First Defenestration of Prague
16 August	Death of King Wenceslas IV
4 November	Battle of Prague begins
13 November	Armistice of Prague
December	Battle of Nekmer
First Crusade	
1420	
17 March	Proclamation of the First Crusade
25 March	Battle of Sudomer
14 July	Battle of the Vitkov
28 July	Coronation of King Sigismund
1 November	Capture of Vysehrad by the Orebites
1421	
June	Diet of Caslav
Late June	Siege of Rabi - Zizka blinded
5 August	Siege of Most
10 September	Siege of Zatec begins
Second Crusade	
16 October	Sigismund enters Moravia
21 December	Battle of Kutna Hora begins

continued

1422	
6 January	Battle of Nebovidy
	Kutna Hora evacuated
8 January	Battle of Habry
10 January	Capture of Nemecky Brode
Third Crusade	
7 October	Siege of Chomutov
22 October	Siege of Karlstein Castle begins
8 November	Armistice ends Third Crusade
1423	
August	Fighting breaks out between rival Hussite groups
1424	
7 June	Battle of Malesov
October	Jan Zizka lays siege to Pribyslav
11 October	Death of Zizka
1426	
16 June	Prokop's victory in battle of Usti
Fourth Crusade	
1427	
Late July	Siege of Stribro
4 August	Battle of Tachov
14 August	Capture of Tachov
1430	
	Hussites raid as far as Czestochow, Poland
Fifth Crusade	
1431	
14 August	Hussite victory at battle of Domazlice
1433	
	Hussite raid reaches the Baltic near Gdansk
1434	
30 May	Battle of Lipany; death of Prokop the Great and Prokop the Lesser
1436	
16 August	King Sigismund proclaims formal end of the Hussite Wars
1457	
	George of Podebrady becomes Bohemia's first and only Hussite king

THE HUSSITE WARS

The Hussite Wars of 15th century Bohemia are often referred to as the Hussite 'Revolution' or the Hussite 'Crusades', although attacks by crusading armies from outside Bohemia formed only part of the overall series of events. These actions also included civil wars between Czech and German troops within Bohemia, and a number of conflicts arising from splits within the ranks of the Hussite movement itself. Yet whatever the terminology, all the Hussite Wars had their origins in the religious differences that first brought about the Hussite movement and continued to motivate all sides throughout the long and bitter struggle. On one side (when they were not fighting each other) stood the supporters of the martyred religious reformer Jan Hus, while ranged against them were a motley 'international brigade' upon whom was periodically bestowed the coveted title of crusaders against heresy.

The Hussite Wars therefore represent something of a transition point in medieval history. From one point of view they were the last of the great crusades of medieval Europe against dissenting sectarian Christians, the successors of expeditions such as those against the Albigensians of southern France. From another standpoint they can be seen as the first in the chain of European revolutions that led to the Reformation, and that were to produce decisive changes in the structural character of European societies.

Scale: 0 5 10 20 30 miles
0 10 20 30 40 50 kilometers
15th Century Border
Present Border where different
Important Towns and Regional Centers
Other Towns and Villages
Castles
Highways (schematic)
Lands of the BOHEMIAN CROWN in the 15th Century
BOHEMIA
MORAVIA
SILESIA
LUSATIA
MEISSEN
UPPER PALATINATE
BAVARIA
AUSTRIA
UPPER AUSTRIA
HUNGARY
POLAND
BRANDENBURG
PRAGUE
Dresden
Chomutov
Most
Litoměřice
Česká Lípa
Liberec
Jablonec
Trutnov
Chrudim
Kutná Hora
Pardubice
Hradec Králové
Náchod
Jičín
Mladá Boleslav
Nymburk
Poděbrady
Kolín
Příbram
Beroun
Rakovník
Žatec
Louny
Kadaň
Teplá
Tachov
Plzeň
Klatovy
Domažlice
Sušice
Strakonice
Písek
Tábor
Jindřichův Hradec
Třeboň
Jihlava
Telč
Znojmo
Nové Město
Humpolec
Pelhřimov
Havlíčkův Brod
Zwettl
Krems
Linz
Danube
Budějovice
Krumlov
Prachatice
Netolice
Vodňany
Písek
Sudoměř
Tyn
Soběslav
Bechyně
Sezimovo Ústí
Vožice
Votice
Benešov
Sedlčany
Rožmitál
Příbram
Zbraslav
Čáslav
Kouřim
Nymburk
Mělník
Roudnice
Slaný
Kralovice
Žlutice
Cheb
Karlovy Vary
Mašťov
Lokat
Kraslice
Ústí
Děčín
Žitava
Krkonoše
Jaroměř
Hořice
Dvůr Králové
Jaromer
Skalice
Nový Bydžov
Chlumec
Česká Lípa
Jablonec
Turnov
Mnichovo Hradiště
Bělá
Litomyšl
Vysoké Mýto
Přelouč
Pardubice
Chrudim
Polička
Habry
Chotěboř
Německý Brod
Přibyslav
Polná
Velké Meziříčí
Jihlava
Moravské Budějovice
Nové Město
Borovany
Trocnov
Jindřichův Hradec
Třeboň
Lomnice
Strmilov
Nová Bystřice
Vranov
Znojmo
Telč
Jihlava

Jan Hus preaching in the open air to the simple countryfolk who flocked to hear his message of religious reform. This was the class which mainly supported his cause after his atrocious death, calling themselves Hussites in his memory. (From the door of the Zizka Memorial, Prague)

These three elements came together in the life and personality of one man: Jan (John) Hus, the Rector of Prague University. Jan Hus was a religious reformer, and it is interesting to note that one of the first of many acts he performed that were to gain him the enmity of the ecclesiastical powers concerned a proposed crusade. This happened at a time when the Papacy was in turmoil, with two, and for a year even three rival Popes, in Rome, Avignon, and briefly in Bologna. In 1412 Pope John XXIII (the Bologna claimant) was planning a war against King Ladislas of Naples, who supported his Roman rival Gregory XII. The financing of this so-called crusade was based partly on the sale of indulgences. An indulgence was in effect a 'safe conduct pass' to heaven for someone who had died; such blessings had often been bestowed upon crusaders in the past by guaranteeing them the forgiveness of sins in return for their military services in some supposedly holy endeavour. To put indulgences up for sale for cash in order to finance a very questionable war was clearly an outrage to the truly devout, and Jan Hus of Bohemia emerged as one of Europe's strongest critics of the practice.

The reaction to Hus's criticism was severe. Pope John XXIII not only excommunicated him, but also demanded the demolition of his church in Prague, calling it a 'nest of heretics'. In the summer of 1412 Jan Hus went into voluntary exile for two years, during which he produced some of his most important writings. He soon attracted a large following, and his listeners were now no longer limited to university students or intellectuals from Prague, but peasants who flocked to his open-air meetings. They saw in his outspoken criticism of the misuse of power by the religious authorities a vision of how their own lot might be bettered. The seeds of a broader revolution were being sown.

Matters seemed to improve in 1414 when Jan Hus was provided with a welcome opportunity to present his ideas to a gathering of the Church hierarchy. The Council of Constance was due to begin in 1415; this was one of the periodic meetings called by the Church to settle doctrinal (and political) quarrels. In the name of restoring unity several factions of reformers and reactionaries argued and intrigued, but there were few more fateful matters for discussion than the heretical views of Jan Hus. Hus knew the bitterness of the opposition he faced from the Church hierarchy, and rightly feared for his life if he dared to put in an appearance. However, he was reassured by a personal guarantee of safe conduct from no less a person than Sigismund of Luxembourg, King of Hungary and younger brother of King Wenceslas IV of Bohemia, and Pope John's main ally.

As Jan Hus had expected, his opinions scandalized the assembled clergy, but instead of facing a theological debate Hus was imprisoned and put on trial for heresy. King Sigismund's pledge proved worthless, and at Constance on 6 July 1415 Jan Hus was burned to death at the stake. All Bohemia erupted at the news of the judicial murder of their hero. Jan Hus was immediately proclaimed a martyr by his followers, and

the Hussite movement, as it soon became known, crossed over the narrow dividing line between religious dissent and political rebellion.

One of the first ways in which the Hussites expressed their outrage was through a simple but defiant religious ritual. It had long been the rule under Canon Law that when the congregation took Holy Communion during the celebration of Mass they received only the consecrated bread, with the clergy alone partaking of the wine. One of the elements of religious reform already practised in Bohemia by Hus's priestly followers had been to share the consecrated wine with the congregation, thus giving them 'Communion in both kinds', as it was termed. As the Council of Constance had roundly condemned this ritual, it rapidly became the touchstone for expressing support for Hus's views. Priests who did not agree to give Communion in both kinds were hounded from their churches, which were then taken over by adherents of reform, who took the name of Ultraquists from a Latin expression for 'in both kinds' - *sub ultraque parte.* The chalice that held the wine became the symbol of the reformed Church of Bohemia, and was an image that would soon be displayed upon the banners of a revolutionary army.

Sigismund of Luxembourg, King of Hungary and younger brother of King Wenceslas IV of Bohemia. His major responsibility for the martyrdom of Jan Hus, and his opportunistic accession to the throne of Bohemia, made him the arch enemy of the Hussite movement. This contemporary drawing idealizes him, its composition referring to the sun and its rays. (Hussite Museum, Tabor)

For all the revolutionary fervour that was sweeping Bohemia there were at first few signs of the reaction from outside that would soon engulf the country in war. The Council of Constance plodded on for another three years and dissolved itself in 1418, having achieved one of its main tasks: the resolution of the Great Schism that had given the Church two Popes. The newly elected Pope Martin V represented a fresh state of unity, and was determined to eradicate the Bohemian heresy that was providing him with the first challenge of his papacy.

However, in practice much depended on the attitude of King Wenceslas IV of Bohemia. This hapless monarch was very much under the influence of his brother King Sigismund, who persuaded him by 1419 that his position as King of Bohemia would be under threat unless he took decisive measures against the Hussites. Wenceslas took action, and the results were a disaster.

The Hussites go to war

At the end of February 1419, King Wenceslas IV took the important but dangerous step of ejecting the Ultraquists from all but three churches in Prague. Some Hussite priests, fearing for their lives, left Prague and strengthened the movement in towns elsewhere in Bohemia, but others took more decisive action within the capital. One of the more vigorous of the revolutionary leaders was a priest named Jan Zelivsky.

On 30 July 1419 he preached a sermon to one of his usual crowded services, fiercely attacking the new city council and its oppressive measures against the Hussites. After Mass, Zelivsky took the Sacred Host

This huge, strange, modern symbolic statue of Jan Zizka - note the telltale mace - stands on the site of his first important victory using the wagon fort tactic, the battle of Sudomer on 25 March 1420.

from the church and led a protest march which was joined by many armed men. The angry crowd eventually made its way to the Town Hall in the New Town at the northern end of Prague's Cattle Market. The leaders of the procession shouted up to the town councillors to parley with them from an upstairs window. Negotiations began; but when the councillors refused to discuss the release of Hussite prisoners the crowd grew agitated, and it was claimed that someone had thrown a stone from the window at the Sacred Host. The enraged mob surged against the doors of the Town Hall and burst in. The hapless town councillors were seized, and thrown from the windows on to the spear points of the armed Hussites standing below. These murders became known as the 'First Defenestration of Prague', from the Latin *de fenestra*, 'from a window'. (A similar act, the 'Second Defenestration', was to take place at Prague castle at the start of the Thirty Years' War 200 years later.)

The shock of this act of violent rebellion proved too much for King Wenceslas IV, who promptly suffered a stroke and died, 'roaring like a lion'. His brother Sigismund, who had been responsible for putting Jan Hus to death, saw his opportunity, and claimed the crown of Bohemia for himself. When the Hussites opposed this cynical piece of opportunism with armed force, the Hussite Wars began.

The rise of Jan Zizka

It was not long before the energy and fervour of the Hussite rebellion received personal expression through the military skills and determination of the man who became its first and greatest leader. Jan Zizka, a former captain of King Wenceslas's palace guard, was a minor landowner from Trocno near Budweis (Ceske Budejovice) in southern Bohemia. This experienced, one-eyed soldier had served as a mercenary in the fighting against the Teutonic Knights in Poland. We know that he helped garrison the castle of Mewe (Gniew) after the famous battle of Tannenberg in 1410, and he may even have been present on that celebrated field.

Zizka's immediate attentions were drawn to Prague, where his opponents were rapidly strengthening their position. Cenek of Wartenburg, the chief advisor to the queen (Wenceslas's widow), reinforced the garrison of the royal castle of Prague on Hradcany Hill by hiring German mercenaries, and strengthened his position around the castle (Prague's so-called 'Small Side') on the left bank of the Vltava. The Charles Bridge was also seized, along with several strategic points across the river in the Old Town. Cenek also gave strict orders that a planned march on Prague by supporters of the Hussites was to be prevented. This particular group of extremists, who owed their origins to Jan Hus's open-air meetings, called themselves Taborites, after Mount Tabor in the Bible.

Jan Zizka moved quickly to occupy the one fortress left in Prague that had not yet passed into anti-Hussite hands. This was the citadel of Vysehrad, whose garrison - many of them Zizka's old comrades - surrendered the fortress to him. When the Taborites arrived a fierce battle broke out for control of Prague. Much of the Small Side was destroyed, leaving it as a no man's land between the opposing fortresses. Such was the devastation within the city that a peace conference was held. Freedom of Hussite worship was guaranteed in return for the

withdrawal of the Taborites and the surrender of the Vysehrad, but this latter concession infuriated Zizka. Feeling that the cause had been betrayed by the effete citizens of Prague who did not share the religious fervour of the Taborites, he left the capital in November 1419 and withdrew to the city of Pilsen (Plsen).

Elated by their relatively easy victory over the accommodating citizens of Prague, the triumphant Royalists turned against Hussite communities elsewhere. In Kutna Hora to the east a fierce persecution began, and when the hangman got too overworked Hussites were thrown down the shafts of the silver mines from which the city derived its prosperity. Pilsen too became a focus of attack; and in March 1420 Zizka decided to move his base further south, to where the Taborites had rebuilt an old strategic fortress called Hradiste and renamed it Tabor. The newly built castle town of Tabor, garrisoned by religious fanatics, was to provide the focus for the Hussite movement throughout the war.

Zizka's march to Tabor was one of two very significant events that took place in the fateful month of March 1420. The other was the proclamation on 17 March of a crusade, with the task of 'exterminating all Wycliffites, Hussites, other heretics and those favouring and accepting such heresies'. From the Royalist point of view the Hussite War had now become the Hussite Crusade; the reaction among the Hussites was to consolidate the resistance movement into a common anti-imperial, anti-papal military front capable of defending its interests to the last.

This magnificent and more traditional equestrian statue of Zizka stands on the site of his victory on the Vitkov Hill, Prague, now called the Zitkov in his honour. Zizka is characteristically depicted with a patch over his right eye, wearing only basic armour - a long mail shirt and coif - and wielding his famous mace.

Long before any foreign crusaders appeared on the scene the local Royalist forces had already been active. Raids were carried out around Pilsen, as the Royalists had no intention of letting Zizka and his men depart in peace for Tabor. They attempted to surprise him near the village of Sudomer but, using the 'war wagons' which were to become a hallmark of his battle tactics, Zizka defeated them on 25 March 1420. The battle of Sudomer was a small affair, but was important as the first significant Hussite victory in the field. It was also a triumph that allowed Zizka to ride in to Tabor as a leader helped and blessed by God. Once there he showed himself to be a competent fortress-builder, arranging for Tabor's defences to be strengthened by a double line of walls above the river.

Zizka's assertion of his authority both on and off the battlefield led to a reassessment of his value among his less enthusiastic supporters elsewhere; and it was not long before an urgent request for help was received from the very citizens of Prague who had previously spurned him.

The long-expected crusading army, under the personal leadership of King Sigismund, was on its way towards the Bohemian capital, where the two main castles were still in Royalist hands (in spite of a temporary

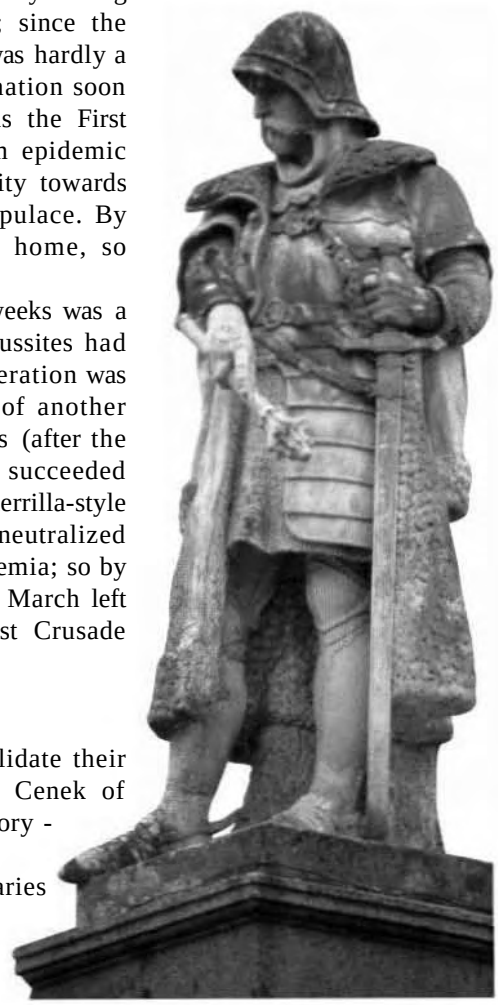
defection to the Hussite side of Cenek of Wartenburg). An attempt by the citizens of Prague to take Hradcany before the crusaders arrived failed miserably, and soon the rebels were being intimidated by the sight of a large tented camp of crusaders on the left bank of the Vltava at the place now called the Letna.

Jan Zizka marched north with all the speed that a medieval army could muster. Sigismund's siege of Prague was making use of all the strategic points around the city except one - the long prominent hill to the east known as the Vitkov. Zizka's eye for ground showed him that if the Royalists also took the Vitkov then Prague would be cut off from all sides and deprived of its supply lines. So Zizka's army, about 9,000 strong, headed straight for Vitkov Hill and hastily erected earthworks and wooden bulwarks there. On 14 July the crusader army attacked the position, and were heavily defeated in one of Zizka's greatest victories. While his men defended their field fortifications with great determination, Zizka led a surprise flank attack from the south. Vitkov Hill is now called Zitkov in his honour, and sports a magnificent equestrian statue of the Hussite leader, with a patch over his eye and mace in hand.

The setback at Vitkov showed King Sigismund that Prague might more easily be secured by political means than by military conflict. On 28 July 1420 Sigismund took a symbolic step towards success by having himself crowned King of Bohemia in St Vitus's Cathedral; since the building lies securely within the walls of Hradcany Castle it was hardly a setting for the popular acclamation of a monarch. The coronation soon proved to the only success that Sigismund was to enjoy as the First Crusade began to fall apart. His troops were suffering from epidemic sickness contracted in their encampment, and their brutality towards the Czech people did nothing to endear the king to the populace. By the end of July many of his German supporters had gone home, so Sigismund retired to friendly Kutna Hora.

The only significant military operation in the following weeks was a valiant Royalist attempt to relieve Vysehrad, to which the Hussites had laid siege. Zizka had by now withdrawn to Tabor, so this operation was conducted by Hynek Krusina of Lichtenburg, the leader of another brotherhood of Hussites, who called themselves the Orebites (after the Bible's Mount Horeb). At the beginning of November they succeeded in taking the fortress, while Zizka was carrying out guerrilla-style operations elsewhere in Bohemia. Zizka's own actions neutralized Ulrich of Rosenberg, Sigismund's strongest supporter in Bohemia; so by the beginning of 1421 the king withdrew eastwards, and in March left Bohemia altogether. Apart from a few skirmishes the First Crusade against the Hussites was over.

Yet another statue of Jan Zizka, in the Town Square at Tabor. As usual, its depiction of his costume and armour are entirely guesswork.



The Second Crusade

The absence of foreign armies allowed the Hussites to consolidate their position during 1421. Hradcany Castle fell to them; and Cenek of Wartenburg - surely one of the great serial turncoats of history - declared once again for the Hussites.

Elated by such developments, in June 1421 the revolutionaries published the Four Articles of Prague at a parliament held at Caslav, where King Sigismund was ritually denounced and religious freedom was proclaimed. But if Sigismund was

not acceptable to the Czech people, then to whom could they offer the crown of Bohemia? In 15th century Europe the concept of a republic was unknown: under God, power had to reside in a person. The consensus of opinion at a further meeting held in August pointed towards Grand Duke Alexander Vytautas (otherwise known as Witold) of Lithuania, a cousin of the King of Poland, with whom he had defeated the Teutonic Order at the battle of Tannenberg in 1410. Vytautas was duly elected (or 'postulated' in the exact term) to the Bohemian throne - in his absence and without his participation.

The castle of Rabi, where Zizka lost the sight of his other eye during the siege of June 1421.

Negotiations with Vytautas were to provide a backdrop to the Hussite Wars for some time to come, but a fight in the immediate aftermath of the Diet of Caslav almost deprived the Hussite movement of its greatest leader. Towards the end of June 1421 Jan Zizka was directing the siege of the castle of Rabi when an archer loosed an arrow from the ramparts and hit Zizka in his good eye. Somehow he survived, to lead his armies in battle for four more years - an almost unique achievement for a now totally blind general.

While Zizka was recuperating in Prague the Hussite movement suffered one of its few military defeats at the siege of Most, which began on 22 July 1421. This, and the siege of Zatec that followed on 10 September, arose out of an attack by a German army under Frederick of Wettin, the Margrave of Meissen, as a prelude to the major invasion of Bohemia that was to constitute the main impetus of the Second Crusade. Zatec held out for three weeks before the news arrived that the blind Zizka was on his way at the head of a relieving army. The Germans fled at the news, thus frustrating King Sigismund's plans for a co-ordinated operation against the Hussites.

Under the circumstances Sigismund might have been wiser if he had postponed the whole enterprise of the Second Crusade until the following year. The campaigning season was now far advanced, but he had by then spent a great deal of money on mercenaries to create a very strong army, and mercenaries had a tendency to desert if they were not used. He had placed his troops under the capable control of one Philip Scolari, otherwise Pipo Spano, a Florentine *condottiere* (mercenary captain) who had made his name fighting the Turks and now led the Hungarian contingent in the crusading army.

In spite of the lateness of the season King Sigismund's force did not hurry unduly, but spent four weeks gathering support in Moravia before heading for their primary objective, the city of Kutna Hora. The rulers of this formerly loyal city had shocked Sigismund by joining the Hussites

against the wishes of its predominantly Catholic German inhabitants, who now regarded Sigismund's approach as a promise of liberation. Zizka, however, anticipated the king's intentions and marched towards Kutna Hora with his combined forces. When the crusader army approached the gates on 21 December 1421 they launched a prolonged attack on the Hussite positions on the hills to the west. This action kept the Hussites occupied while Pipo Spano sent some units around Zizka's right flank to the northern gate of the city, which Royalist sympathizers opened to them. A massacre of the Hussites then began within Kutna Hora, from which Zizka was cut off in his wagon fortress on the hills above. Realizing that he had to force a breach in the enemy lines, he chose his moment and his target perfectly. Battering their way through the Royalist ranks using firearms, the Hussites escaped towards the north. There was no pursuit, so they rested at nearby Kolin to plan their next move.

A statue representing Prokop the Great, who took over the leadership of the Hussite movement following the death of Jan Zizka. Interestingly, he too is shown armed with a mace. (Town Hall, Tabor)

This came quickly, on 6 January 1422; Zizka struck first against a body of crusaders at Nebovidy, whom they drove back in a southerly direction towards Kutna Hora. The Hussites followed confidently, and Sigismund was so alarmed that he decided to evacuate Kutna Hora immediately. He made a brave attempt at a stand at the village of Habry on 8 January 1422, but the pursuit continued to the town of Nemecky Brod (modern Havlickuv Brod), where the bridge became jammed with fleeing troops. The order was given for others to cross on the ice, but after initial success the ice gave way and many were drowned. After a short siege Zizka captured Nemecky Brod, and destroyed it so thoroughly that 'wolves and dogs ate the corpses in the town square', as one chronicler put it. Sigismund fled to the safety of Brno in Moravia, smarting from his greatest defeat since the battle of Nicopolis in 1396. The Second Crusade was over.

The Third Crusade

Insult was added to Sigismund's injury when Grand Duke Vytautas of Lithuania wrote in a letter to the Pope, dated 5 March 1422, that he would take the Czechs under his protection in order to return the schismatics to the fold of Mother Church. To this purpose he was sending as his representative to Bohemia his nephew Sigismund Korybut, who promptly presented himself in Bohemia as the regent of the postulated king. Many of King Sigismund's supporters felt that a third crusade would be the only way to settle matters with the Hussites and to neutralize Vytautas's claim to the throne, although the king was disinclined to take a personal role once again.

The resulting Third Crusade was a half-hearted affair. Crusading armies entered Bohemia from the north and the west in October 1422, and the first city to fall was Chomutov. The next objective was the relief of the siege of the great castle of Karlstein, the only strong fortress to have remained in Royalist hands throughout the war so far. Prince Korybut of Lithuania was currently sitting outside it, and found himself involved as much with negotiations for a truce as with any actual fighting. An armistice was signed on 8 November, and the Third Crusade promptly ended, the only one of the five not to end with a total disaster for the crusaders.

Internal rivalries

Following this peaceful settlement the Hussites were left alone for a longer period than before, but this relative safety in fact threatened to jeopardize the Hussite movement seriously. As long as they were under threat from outside they had stood united, but when that threat was diminished disagreements, usually of a religious nature, began to weaken their ranks. Early in August 1423 such differences erupted into fighting between rival groups of Hussites. One result of this was that Jan Zizka left Tabor and established himself in eastern Bohemia as leader of the Orebites. The most important clash between rival Hussite armies took place on 7 June 1424 at Malesov, where Zizka destroyed a strong rival army raised by the citizens of Prague. By this victory Zizka confirmed his leading role in the movement; soon the Orebites and Taborites were reconciled, and played leading roles for the rest of the war.

LEFT Impressions of two anti-Hussite crusaders, typical of the multi-national force that followed King Sigismund's banner, in the bas-relief on the door of the Zizka Memorial on Zitkov Hill, Prague.

ABOVE The bas-relief on the Zizka Memorial represents various types who figured in the Hussite armies; this unarmoured swordsman is shown wearing riding boots. Cavalry played a considerable part in many of the Hussite victories, and later terrorized much of the region during the period of the so-called 'beautiful rides' into Poland.

Early in October 1424 Jan Zizka set out on what was to prove his last campaign. He touched his old road of victory by passing through Nemecky Brod, and then laid siege to the castle of Pribyslav. There the old blind general contracted some form of plague, and died on 11 October in his siege encampment. A colourful legend tells us that before he died Zizka ordered that a drum should be made out of his skin and beaten at the head of the Hussite army.

The Wars of the Orphans

The death of Zizka was felt acutely by his followers, particularly the Orebites, who now called themselves 'the Orphans' as testament to the loss they had suffered. Following Zizka's death the military initiative was taken by his successor Prokop the Great (also known as Prokop the Bald), a gifted leader but a man with very different views from Zizka. Prokop radically changed the Hussite strategy. From Zizka's policy of defensive actions against invaders Prokop moved to a pre-emptive pattern of invading any neighbouring territories from which previous crusades had emerged.

This provocative strategy was eventually bound to cause a reaction in the form of a fourth crusade, but before this could be launched Hussite and German armies fought a major battle at Usti in June 1426. Usti lay near the German border, and the victorious Prokop proposed following

Representation of a group of Hussites from the bas-relief, showing a broadly accurate range of features of early 15th century eastern European war gear. Note the kettle hat and visored sallet; the caped hoods and mail shirt; the 'awlpike', 'morning star' and flail, and the woman at left armed with a long spiked mace.

up his success by an invasion of Saxony. This did not materialize, but raids into Silesia and Austria were carried out over the next couple of years.

The **Fourth Crusade** finally opened in 1427, and began with the siege of Stribro. Henry Beaufort, Bishop of Winchester, a half-brother of King Henry IV of England, fought at this battle. It was something of a disaster, because the crusaders withdrew in some disorder at the approach of the Czechs, and suffered losses only when the Hussites caught up with them near Tachov on 4 August. Cardinal Henry, in furious contempt, tore the imperial standard into pieces. This rout brought the Fourth Crusade to an abrupt and premature end. There was no further pursuit across the border by the Hussites - Tachov was a more immediate and promising goal, and the city and its castle fell on 14 August.

For the next four years no attempt was made by Catholic Europe to invade Bohemia. Instead the Hussites took the initiative in grand style, sending raiding forces ranging far and wide through Germany, Austria and Hungary. One raid in 1430 took them as far as Czestochowa in Poland, and the Hussites became notorious for their depredations. The reputation that they earned in some regions far from Bohemia is shown by a remarkable letter attributed to Joan of Arc, who allegedly wrote to Bohemia to threaten the heretics with destruction if they did not cease their blindness. By contrast the Hussites, convinced as ever that God was on their side, termed these raids *spanile jizdy*, 'beautiful rides', though the destruction they wrought was anything but beautiful.

The Hussite raids added to the pressure on King Sigismund, who was now plagued not only by Hussites but other civil wars, rebellions, and a Turkish threat to his Hungarian domains from the direction of Serbia. Retribution against the Hussites was to be delivered through a **Fifth Crusade.** The invading army was intercepted near the town of Domazlice, of which they had been conducting a fruitless siege. On 14 August 1431 the Hussite army scattered the crusaders at the battle of Domazlice, one of the most decisive encounters in all the Hussite Wars. This time the crusaders had war wagons of their own, but these proved to be of no avail since they were used incorrectly; the victorious Hussites were delighted to find that many of the apparently military vehicles were actually supply wagons stocked with wine rather than weapons.

The Catholic humiliation at Domazlice meant that the stage was now set for a peaceful settlement to the Hussite problem. Negotiations began at Basel in January 1433, where the chief representative from the Catholic side was Cardinal Cesarini. He had personal experience of Hussite warfare, as he had been forced to flee from the field of Domazlice.

Meanwhile the 'beautiful rides' went on, culminating in the most audacious Hussite raid of all in the summer of 1433. War had broken out once again in 1432 between the kingdom of Poland and the Teutonic Knights of Prussia. Eager to help, the Hussites signed a solemn alliance against the Order in July of that year, and in 1433 an Orphan army marched through the Neumark into Prussia and captured Tczew (Dirschau) on the Wisla (Vistula) River. Eventually they reached the mouth of the Vistula where it enters the Baltic near Gdansk (Danzig), and performed a victory celebration to prove that nothing but the wide sea itself could stop their advance. (This insult to German hegemony was later summed up by the 19th century Prussian nationalist Heinrich von Treitschke, who wrote angrily how they had 'greeted the sea with a wild Czech song about God's warriors, and filled their water bottles with brine in token that the Baltic once more obeyed the Slavs'.)

The quarrels of success

Of far more significance to the people of Bohemia were the divisions that were developing in the Hussite ranks when the movement was confronted with the prospect of a genuine and lasting peace. The most important religious issue was whether to force the practice of Communion in both kinds upon the citizens of places such as Pilsen, who had remained Catholic and Royalist throughout the war. Some saw a tolerant approach as a necessary concession to achieve unity, others as a serious betrayal of their fundamental religious principles.

A military advance against Pilsen by the more rigid faction proved a failure, and led to a mutiny within Prokop the Great's army. This was followed by an alliance of the high nobility and the Old Town of Prague against the radical Taborite and Orebite brotherhoods. A bloody battle was fought at Lipany on 30 May 1434, at which the brotherhood leaders Prokop the Great and Prokop the Lesser were defeated and both were killed.

From then on the role of the brotherhoods was almost completely neutralized. The tragic internecine battle of Lipany effectively marked the end of the Hussite Wars, and the immediate winner was, of course, King Sigismund. On 16 August 1436 the wily old monarch solemnly proclaimed the restoration of peace between 'heretical' Bohemia and the Christian world, thus formally ending 17 years of war. Eager to avoid antagonizing those Hussites whose internal squabbles had finally secured his throne, he bided his time before launching plans to eliminate the Ultraquist heresy once and for all. But death intervened in September 1437, and as his successor only lived a short time the Ultraquist church used the ensuing interregnum to establish a position as the Reformed Church of Bohemia.

This position became even stronger with the regency, and finally the accession to the throne in 1457, of George of Podebrady, Bohemia's first and only Hussite king. King George had to withstand a short but worrying attempt at a crusade against him by the great King Matthias Corvinus of Hungary in 1468, a time that a Czech chronicler called 'eight horrible weeks'. However, George dealt with the invaders in the same thorough way as his predecessors had defeated earlier crusaders, and ensured the survival of the Hussites' revolutionary ideas for long enough for them to become branches of the continent-wide Reformation in the 16th century.

ARMIES OF THE HUSSITE WARS

The Crusader armies

The combination of religious fervour and personal greed that had sent crusading armies from the Baltic to the Black Sea is reflected in the astonishing list of nationalities present during the First Crusade's attempt to take Prague. Let the chronicler Brezova speak for himself:

> 'There the people were of many different nations, tribes and tongues. Besides Bohemians and Moravians there were Hungarians and Croatians, Dalmatians, and Bulgarians, Wallachians and Szekelys, Cumans, Tassyans, Ruthenians, Russians, Slavonians, Prutenians, Serbs, Thuringians, Styrians, Misnians, Bavarians, Saxons, Austrians, Franconians, Frenchmen, Englishmen, men from Brabant, from Westphalia, Holland and Switzerland, Lusatians, Swabians, Carinthians, Aragonians, Spaniards, Poles, Germans from the Rhine and many others.'

Heymann, the biographer of Jan Zizka, adds in a note that although one-third of these 33 nations were German-speaking, the list represents almost all of medieval Europe except Scandinavia, and that the omission of Italians was probably an oversight...

The motivation that sent this huge number of nationalities to fight in Bohemia ranged from religious devotion to rampant self-interest, and nowhere was a combination of both extremes better expressed than through the personalities of the men who led the crusader armies. On the surface, at least, the epithet of 'crusader' ensured that the Hussites' proto-puritanism was opposed by an equally strong religious commitment to the most extreme expression of medieval Catholicism. King Sigismund had been the leader of the crusade against the Muslims in 1396 that had met with disaster at the battle of Nicopolis, and many of his followers had served in other crusading enterprises such as the Tannenberg/Grunwald campaign. Their spiritual welfare was well catered for, and we know from the imperial ordinance issued for the Fifth Crusade in 1431 that four or five priests were to accompany each troop 'in order to preach to the people and teach them how to behave themselves and how to fight for the Holy faith' - words that could have come directly from the Taborite leaders.

Knightly arms and armour

Mounted knights fought on both sides during the Hussite Wars as the elite on the battlefield, and as the conflict drew in crusaders from all over Europe it is not surprising that a certain uniformity existed in the types of armour seen among the nobility on both sides. The main differences in arms and armour between the mounted elite of both sides would be based on rank and wealth rather than nationality; this applied even in Lithuania (appearing in the list above as Ruthenia) and Russia, which had historically been subject to other influences.

The nobility among the crusaders and the Hussites alike would generally have worn plate armours of Italian style, since northern Italian workshops still dominated this manufacture throughout Europe; a minority would have displayed the output of the southern German

armourers who were just beginning to challenge Italian dominance. The second quarter of the 15th century saw simultaneous use of armours dating from the last quarter of the 14th century, through those seen at Tannenberg/Grunwald in 1410 and Agincourt in 1415, to the latest styles of the time of Jeanne d'Arc in the 1430s.

The predominant style of helmet was a bascinet with a hinged visor, fixed to a padded aventail of mail which fell to cape the shoulders. Some 'great bascinets' would also have been seen, with deep bevor plates that reduced the mobility of the head. Many slightly varying styles of broad-brimmed *chapel-de-fer* or 'kettle hat' were common in Germanic lands, sometimes worn in conjunction with plate armour among the knightly class, particularly for foot combat.

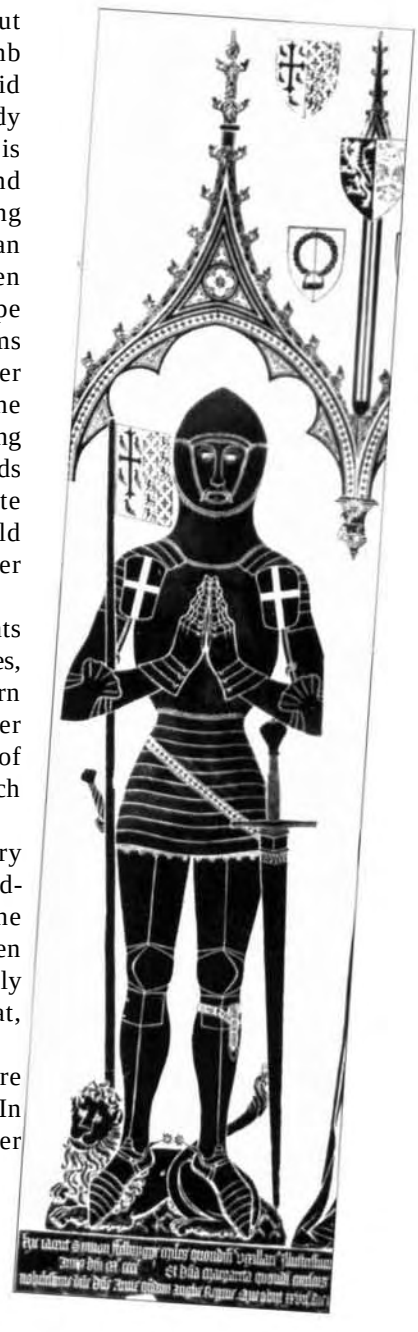
The overall trend in body armour was towards complete plate; but the fashion for fabric surcoats over the torso seen in many of the tomb effigies which are our best sources make it difficult to distinguish rigid breastplates from the many types of ringmail, scale or brigandine body defences still worn under or in place of a plate cuirass. Mail is conventionally depicted below plate defences at the groin, elbows and armpits, and the latter were often protected by rondels of plate hanging from straps. Scale armour was notably more common in eastern than western Europe. Two distinctly Germanic styles of breast-plate have been identified: a 'globous' shape with a rounded belly, and a 'box' shape with a squared-off profile at the belly. Complete plate defences for arms and legs would now have been almost universal, but fabric or leather armour with rivet heads indicating inner scales are still seen on the thighs of some effigies. Tight-fitting 'coat armour' and loose-fitting surcoats often displayed heraldic colours and charges, as did the shields that were still quite widely carried, although the latest suits of complete plate made them increasingly unnecessary. Poorer knights would probably have worn simpler and less complete body armour of older styles, making more use of mail, scale and brigandines.

The armour of the Lithuanian, Polish and Russian crusader knights would almost certainly have been of imported Italian and German styles, even though their followers would presumably have shown Eastern influences in a greater use of mail, scale and lamellar armour, leather boots, and, among Russians, conical or 'spired' helmets. The horses of the most prominent knights were covered with caparisons on which their heraldic devices appeared.

From horseback the knight wielded the lance which was his primary weapon. This was backed up by the broadsword, often of hand-and-a-half style, girded on by a belt which sometimes passed around the waist more than once. The shape of the armour at the hip very often supported a low-slung dagger belt, plated and sometimes richly decorated. Secondary weapons were maces, axes and, for foot combat, a range of different pole-axes and other shafted weapons.[1]

The footsoldiers who followed the armoured knights on crusade were armed with crossbows, swords, spears and a range of other polearms. In overall appearance they would not have differed greatly from the better equipped among the Hussite footsoldiers described below.

The brass of Sir Simon Felbrigg in Felbrigg Church, Norfolk, shows armour typical of the decade 1410-20; many of the crusaders who took up arms against the Hussites would have worn full plate like this, and carried hand-and-a-half swords with a long-pointed blade for both cut and thrust. The helmet seems to be a 'great bascinet', with a large bevor plate. (Royal Armouries, Leeds)



1 See also MAA 136, *Italian Medieval Armies 1300-1500;* MAA 144, *Armies of Medieval Burgundy 1364-1477;* MAA 166, *German Medieval Armies 1300-1500;* MAA 337, *French Armies of the Hundred Years War;* and MAA 367, *Medieval Russian Armies 1250-1500*

There are several references in the literature on the Hussites to women accompanying armies not only as camp followers, but as active combatants. In wars between 'crusaders' and 'heretics' entire communities risked merciless butchery, and it made good sense for strong peasant women, raised to hard physical labour, to fight alongside their menfolk and with the same improvised weapons.

The Hussite armies

If the fate of the Hussite revolution had depended upon the lances and armour of the nobility of Bohemia, then the movement would have been crushed within months. As shown by the extreme example of Cenek of Wartenburg, the relatively small knightly class of Bohemia were divided in their loyalties and often suspicious of the ideals of equality before God preached by the radical Taborites. The majority of troops within the Hussite armies inevitably consisted of peasants and townsmen who were, initially at least, untrained in the arts of war. Unlike the contemporary Swiss, defending their difficult mountain valleys against repeated threats from the rich nobility of Burgundy and their professional mercenaries, the peasants of Bohemia had few natural advantages of terrain, nor any tradition of a community trained to arms. All they had initially was enthusiasm, stoked by a religious fervour that approached fanaticism - furious enough to make all internal differences vanish on the field of battle, but also brittle enough to allow bitter sectarian disputes to emerge once any immediate external threat had passed. Their religious zeal encouraged a contempt for anyone who did not share their beliefs, whether Catholic Royalists or members of the rival 'splinter groups' that emerged from within the Hussite ranks.

It is a testament to the genius of Jan Zizka that he was able to transform this unpromising material into a force capable of winning battles, and that he did so in a remarkably short space of time. As a result the flag of the chalice was followed by thousands of ardent peasants whose military skills may have been only recently learned, but who had the potential for victory under the right leader. It was a feature of the Hussite Wars that such leaders could rise to prominence on the basis of their talents, and Jan Zizka was the outstanding example. His previous experience in Prussia had clearly given Zizka an understanding both of the challenge posed by heavily armoured mounted knights, and of possible ways to neutralize their advantages. One early conclusion Zizka drew was that he had to fight defensively, like a guerrilla leader, and avoid pitched battles on open ground where his lightly armed foot-soldiers could be swept aside by the force of a cavalry charge. Out of this realization grew some of the most sophisticated methods of defensive warfare seen in the Middle Ages.

Discipline

Jan Zizka is best known for his innovative use of military technology, but of equal importance was his ability to bind together into a victorious army a disparate movement from widely different social classes and of differing religious views. The radical core of the Hussites were the brotherhoods such as the Taborites, stirred up by genuine enthusiasm for the much-needed Church reforms preached by Jan Hus. In an age of absolute belief in the importance of the soul's finding the true path to everlasting salvation, religious zealots brooked no contradiction and shrank from no means of achieving the desired end. Further inflamed by a strongly anti-imperialist sentiment and fervent anti-German Czech nationalism, the Taborites offered their commander highly motivated, if sometimes volatile material with which to work.

The religious fundamentalism of the Taborites and the Orebites invites comparison with the attitudes that were to emerge in the 17th

century under the name of Puritanism. It contrasted quite markedly with the more calculating and accommodative approach favoured by their more politically motivated supporters among the citizens of Prague, and this led to serious disagreements. The bright clothes and bourgeois lifestyle of the capital scandalized the Taborites when they arrived to help the citizens in 1419, and Prague's willingness to negotiate with their Catholic enemies drove a wedge between these elements within the Hussite movement.

At the upper end of the social scale within the movement were the Hussites' supporters among the Czech nobility. Religion was less important to them than their own social position vis-à-vis the German elite, but some of the minor nobility extended their political support for the Hussites into a military contribution. They would appear on the battlefields of the Hussite Wars as mounted knights, and if their activities could be integrated into the overall plan then their contribution was very valuable. Accounts of Hussite campaigns suggest that when mounted knights were present in numbers they stationed themselves to the rear of the *Wagenburg* (wagon fort), ready to attack the enemy flanks. If their numbers were small they took up positions within the wooden walls of the mobile fortress.

The organization of the Hussite armies was strengthened from 1423 onwards by the issue of Jan Zizka's *Statutes and Military Ordinance of Zizka's New Brotherhood*, signed by him in that year. Much of the content refers to religious matters, but the following extracts show an equal concern for strict military discipline:

> 'When we want to leave some town or move away from some place where we have encamped in the field, no one shall ride in advance to the next town or walk or drive there to secure quarters or lodgings, nor shall anyone encamp in the field, without the permission or order of his older captain...
>
> 'No one shall light a fire or set anything else on fire on the march or while lying encamped, except those who will be specially selected...
>
> 'When they move out from some place and before they undertake to order some enterprise in the war, they shall first make a prayer to the Lord God, and kneeling down before the Body of God and before the Face of God... pray that Lord God the Almighty will give his help, that they thus may wage his sacred war for the praise of his sacred name and for the enhancement of his beneficence...
>
> 'After that the people shall form in proper order, each troop under its standard... And once they have been assigned to a troop or formed under one standard they shall march in good order...
>
> 'Whenever and wherever the Lord God grants us to overcome and defeat our enemies and conquer towns, fortresses or castles, and thus to take booty... then shall all things captured and all booty be carried and assembled at a place chosen and pointed out by our elders, be it much or little...
>
> 'Also we do not want to suffer among us faithless men, disobedient ones, liars, thieves, gamblers, robbers, plunderers,

drunkards, blasphemers, lechers, adulterers, whores, adulteresses, or any other manifest sinners, men or women. These we will banish or chase away... [and] will punish all such crimes by flogging, banishment, clubbing, decapitation, hanging, drowning, burning and by all other retributions that fit the crime according to God's Law, excepting no one from whatever rank or sex.'

The values of the Hussite movement were generally warlike, and the justice of the cause was never doubted; but on rare occasions arguments for a pacifist ethos were raised within the Hussite ranks. Peter Chelcicky, for one, severely criticized those who had qualms about eating pork on Fridays but shed Christian blood without the least concern. According to him, the golden age of the Church had been its pacific age. Christian law forbade murder, so although all Christians were required to obey the state, they should refuse both public office and military service. Yet Chelcicky was a lone voice, and the attitude of the Hussite leaders was one of unwavering commitment and ruthlessness. Jan Zizka was no saint, and although he refrained from the excesses of murder and pillage frequently associated with the mercenaries and crusaders who came to Bohemia from outside, he could be merciless to victims when the occasion demanded. His expedition against the Adamites, an extremist sect who threatened the unity of the Hussite movement, ended with the prisoners being burned to death.

A selection of reproduction polearms as used by the Hussite armies; most had their origins in agricultural implements. (Hussite Museum, Tabor)

Costume

All depictions of the Hussites in action show them as predominantly an army of peasant infantry, and this is reflected both in the costume they wore and the weapons they carried.

The basic dress of the Hussites did not differ to any appreciable degree from the clothing seen in contemporary depictions of a similar social class throughout early 15th century Europe. Images depicting labouring peasants, including some who are only partially clothed for activities such as harvesting, attest to the normal range of garments. Over short under-drawers men wore very long, loosely cut, T-shaped shirts, sometimes slit part way up the sides from the bottom so that they could be tucked or rolled in a number of ways. Legwear was normally stocking-like hose for each leg, which could be tied up to the waist or rolled down to the knee; the shirt often hung down between these at the seat. Some hose had integral feet, with doubled, or sewn-on canvas or leather soles; others, only a stirrup-like section under the foot.

Shoes or boots were normally ankle length; the simplest were loose and bag-like, gathered and tied around the ankles; others were more shaped, and fastened with laces or buttons at the outside. Riding boots

were at least knee length, often cut loose in the leg but gathered, and worn with the tops folded down; the toes were more pointed than the broader cut of shoes made for walking. Shoes and boots are often shown as blackened.

The most basic outer garment was a shift-like woollen tunic, long-sleeved and reaching almost to the knee; some were still of pullover cut, while others fastened at the front by laces, loops and toggles, or buttons. Alternately we see more lightweight, tight-fitting doublet jackets, at this date quite long in the skirt, which laced directly to the hose; sometimes the sleeves were also made separately and laced on at the shoulders. All such garments were often worn in layers in cold weather. The quality of the cloth and cut presumably varied widely with wealth.

Coifs - close-fitting linen bonnets with chin tapes - were still to be seen, sometimes worn under other headgear. Woollen hats, some with a distincdy shaggy finish, are depicted in a range of 'flower pot' or inverted cone shapes, the latter with the brims rolled or folded in various ways. As throughout Europe, hoods extending down into shoulder capes were popular and versatile; some had the bottom edge of the cape cut in decorative shapes, and some had a long liripipe or tail extending from the top corner of the hood. Other headgear is sometimes seen worn over hoods; or they could themselves be rolled up to form a 'doughnut'-shaped hat with the bottom of the hood hanging like a bunched flap. Cloaks of various lengths and weights were worn, sometimes fastened with buttons at the throat or shoulder. Sheepskin jerkins, or for the wealthier classes tunics lined or trimmed with sheepskin or fur, are also depicted in cold weather, as are fleece or fur caps.

There are several references in the literature on the Hussites to women fighting alongside their menfolk. They would have worn ankle-length dresses over an equally long underdress of linen or lighter wool; again, the sleeves of the outer dress were sometimes laced on at the shoulder or above the elbow. The outer dress could be bunched up to lift the hem out of the mud or dust by gathering part of it under a waist girdle or belt. Modesty required the covering of the hair by 'veils' or headcloths arranged in various ways. The caped hood was apparendy as popular among women as men, and is sometimes shown elbow-length and fastened with buttons down the front.

Reproductions of long-shafted 'morning star' polearms. (Hussite Museum, Tabor)

Armour and weapons

The protective armour worn by ordinary Hussite soldiers would have been limited, since for many the only possible sources were battlefield booty or looted castle armouries. It is logical that such pieces of armour would therefore have become more common as the wars dragged on and Hussite victories multiplied. Illustrations tend to depict the users of more conventional polearms such as halberds as being more fully equipped 'regular' troops than the more simply attired flailmen; some of these perhaps represent the household followers of the noblemen. The footsoldiers on the crusader side would have looked very similar.

The broad-brimmed iron kettle hat was the typical helmet of the Germanic lands, and appeared in many slightly varied forms: with the crown rounded, angular, swept up into a point or a median ridge; the brim deep and pierced with eye slots, or swept down into a frontal point, or even extended into a long nasal bar. They are shown worn over cloth

or mail hoods. The classic bascinet and aventail was still in widespread use, normally unvisored; and a number of very simple cap-shaped helmets are also depicted, including some built up from many metal scales rather than drawn down by hammering single plates. (Plate A2 shows an interesting alternative for the poorest class of soldier.)

Ringmail shirts with skirts and sleeves of various lengths are illustrated, worn alone or in combination with breastplates or stuffed fabric 'soft' armours, and mail collars or 'standards' are seen worn by knights and footsoldiers alike. The best-equipped infantry sometimes wear breastplates, with or without mail or scale skirts over the belly and groin, or even with faulds or tonlets of 'hooped' plates. Plate knee or elbow pieces are sometimes shown worn by men without other plate defences, and other limb armour seems to have been uncommon. For an infantryman wielding any kind of polearm the first priority after a helmet and torso protection was probably gauntlets.

The footsoldiers on both sides carried sidearms - swords of various lengths and designs, including the heavy, single-edged falchion (shaped something like a giant 'Bowie knife'); and the poorest peasant would have had an all-purpose knife or a hatchet for hand-to-hand fighting. Many of the pole weapons associated with the Hussites had their origins in agricultural implements. At their simplest these would have included iron-tined pitchforks and re-shafted scythe blades and pruning hooks, but the modified implement most specifically associated with the Hussites in contemporary depictions and accounts seems to have been the flail. Just as the farm wagon lent itself to conversion into the 'war wagon', so the agricultural flail used for threshing crops could easily be converted into a weapon of war by any village smithy. Most simply, nails were driven through the wooden head, or an iron-spiked and -banded head was made to replace the original. These were wielded most effectively by men who had been threshers all their lives - accustomed to hard physical activity for hours and days at a time - standing within the safety of the wooden walls of the wagons.

A pavise, as used by Hussite footsoldiers; its wooden surface is covered in this case with decorated leather. The device of a chalice appears near the top of the central keel. (Hussite Museum, Tabor)

Other pole implements that were dangerous if used from the shelter of defensive positions included 'morning stars' - shafted clubs with savagely spiked wooden heads. More conventional polearms included spears of various lengths; and bills, consisting of a blade extended into small triangular lateral spikes and one large spike or hook at the end. A ploughshare may have been the origin of a weapon that looked like a primitive version of the Swiss halberd, with the blade sharpened and beaten to a point at one end and a side spike added to the shaft. Finally, the *aalspeiss* or 'awlpike' had one long spike and was fitted with a guard to protect the hands of the user. One chronicler wrote that 'the heretics shot with their guns, of which they had plenty, and also used long hooks to drag noble knights and pious soldiers from their horses'.

The handguns are described below in the section on Hussite artillery, but they were always outnumbered by crossbows. The crossbow was an ideal missile weapon for soldiers whose wagon walls provided cover for spanning in safety. Crossbows, which could punch through even plate armour if the range and angle were right, were so formidable that, notoriously, their use had

been condemned by the Second Lateran Council in 1139 as being 'hateful to God'. However, the Church permitted them to be used against non-Christians, and neither side in the Hussite Wars had any qualms about slaughtering enemies who were regarded as 'heretics'. Until the 15th century most crossbows were of composite construction, their thick staves made of cunningly spliced and glued layers of horn, sinew and wood; the poorest peasants might carry less powerful hunting bows with simple wooden staves. Steel stave crossbows had begun to appear by the beginning of the century, but it is likely that the majority of those used in the Hussite Wars were still of composite construction. It is noted that steel crossbows gained ground only very slowly in the Baltic lands to the north because of fears that the staves would break in cold weather; composite horn bows, by contrast, became about a third stronger in cold conditions, so would have suited the variations in temperature encountered during the Hussite crusades.

The men who carried pavises played an important role in defence. These were large shields, nearly the height of a man, which could shelter a couple of footsoldiers - typically, while spanning crossbows or reloading handguns; they were fixed in place either by ramming a protruding bottom spike into the ground, or by propping with an attached bar. They were made of wood with a prominent strengthened central ridge, covered with leather, canvas or parchment, oiled or tarred against damp, and often decorated. Among Hussites the image of the chalice was always a prominent feature of such decoration. Horsemen and wagon drivers had smaller, more manageable shields.

Hussite heraldry

The mounted knights who fought for the Hussites would have been recognisable by their personal liveries and coats of arms displayed on their shields, and their surcoats where such were worn. The Hussite leaders such as Jan Zizka and Prokop the Great never appear in illustrations with their own heraldry. Instead they are depicted as very simply dressed, even if heavily armed, and lead their followers under the common device of the chalice. Sometimes the chalice appears on flags, and always on shields, as a simple shape of uniform colour. On other flags it is painted 'three-dimensionally', i.e. with shadowing and highlighting; and there may also be a motto. Every war wagon flew a chalice flag. The second most common motif was the image of a goose - the literal translation of the martyred Jan Hus's surname. In some illustrations the motifs of the goose and the chalice are combined.

HEAVY ARMS & EQUIPMENT OF THE HUSSITES

The origins of the war wagons

Jan Zizka is best known for his use of the Wagenburg, a defensive arrangement created from a number of wagons. Wagenburg warfare arose from Zizka's cautious and defensive approach to the problem of the mounted knight. The earliest expression of this attitude appeared in the entrenchments that were thrown up around towns and the placing of their inhabitants on a war footing - the fortification of the Vitkov is

One of the best modern reconstructions of a Hussite war wagon is this model at Visegrad Castle in Hungary. The viewpoint is down towards its tail and right hand side - the side that would have been on the inside in a *Wagenburg.*

a good example. But it was not long before Zizka began to make use of one of the greatest assets at his disposal in order to transform his army's potential for mobile campaigns. His followers came from a predominantly agricultural background, so one thing which his makeshift army never lacked was transport, in the form of farm carts.

The use of carts and wagons to transport a medieval army's baggage was commonplace; nor was it an innovation to enclose a camp or field headquarters within a circle of such wagons. We may note the practice at the battle of Mohi (the Sajo River) against the Mongols in 1241, and at Crecy in 1346; and a Czech predecessor of Zizka had in fact recommended such use in Bohemia. Zizka's contribution was to use wagons not primarily as supply carts that could be converted into a makeshift barrier when the need arose, but - deliberately and primarily - as a mobile defensive fortification that could be erected rapidly as a central aspect of his tactics.

It is not entirely clear how Zizka arrived at this plan. Oman, in his *The Art of War in the Middle Ages,* suggested that Zizka's experiences in eastern Europe made him familiar with the Russian *gulai-gorod* or moveable fortress; but this is most unlikely, since the first recorded use of the gulai-gorod by Muscovite troops is not until the 16th century. Duffy, in his *Siege Warfare,* in fact suggests the reverse - that it was the Hussites who influenced the Muscovites. Oman's other suggestion, that Zizka copied the technique from the Lithuanians whom he met in their campaigns against the Teutonic Knights, also seems unlikely, since the predominant Lithuanian arm was light cavalry. Neither is there evidence for any use of wagons other than a lumbering supply train during the Tannenberg/Grunwald campaign in which Zizka is believed to have served.

When Zizka withdrew from Prague to Pilsen in early 1420 he was faced by the challenge of raids mounted by Royalist forces against nearby Hussite towns. Bohuslav of Svamberg, who held the nearby castle of Krasikov, carried out several such raids, of which we know little except for one particular operation. Some time in December 1419 Svamberg, at the head of a fairly strong army, tried to trap Zizka when the latter besieged the Royalist castle at Nekmer a little to the north of Pilsen. Confident of his superiority, Svamberg attacked; but according to the chronicler he was beaten back with heavy losses by Zizka's men, who had with them seven wagons 'on which were those snakes [i.e. guns] with which they destroy walls'. Perhaps Svamberg's men and horses were

(continued on page 33)

1: Jan Zizka, c1420
2: Hussite peasant soldier with war flail
3: Hussite spearman
1
2
3

A

1: Sigismund of Luxembourg, 1420
2: Hyneck Krusina of Lichtenburg
1
2
Angus McBride

1
2
3
1: Cenek of Wartenburg
2: Bohuslav of Svamberg
3: Ulrich of Rosenburg
Angus McBride

HUSSITE INFANTRY
1 & 2: Crossbowmen
3: Billman
4: 'Morning star' man
1
2
3
4
Angus McBride 03

HUSSITE
FIREARMS
1: Handgunner
2: Trestle gun
(tarasnice)
3: Cannon
(houfnice)
1
2
3

F

1
2
1: Cardinal Henry Beaufort, 1427
2: Sigismund Korybutas
Angus McBride

G

H

unused to the noise of gunfire, or perhaps they were simply outclassed by the fanatical resistance of the defenders? Whatever the exact reason for Zizka's success, Nekmer marks his first use of wagons arranged defensively and armed with artillery.

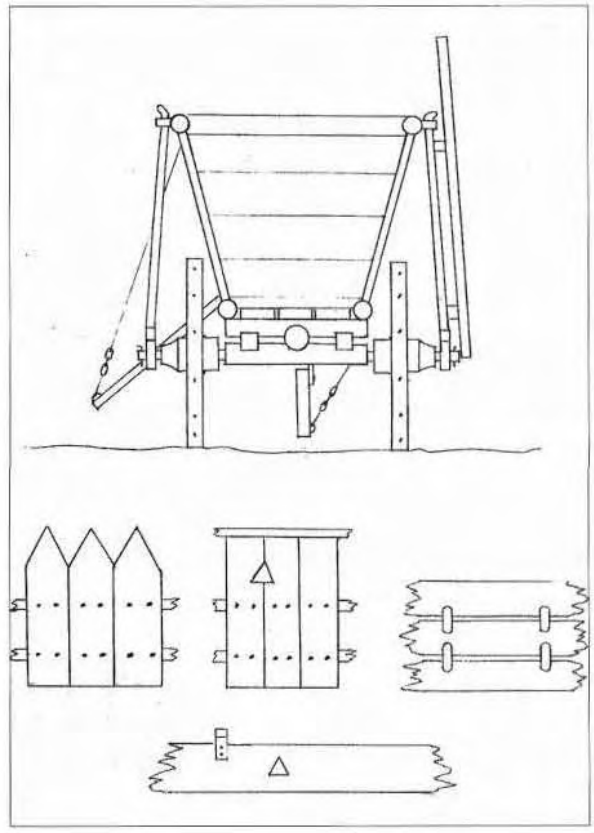
At Nekmer Zizka's tactics may simply have been a case of necessity being the mother of invention. A more deliberate approach is certainly suggested by his first significant victory, at the battle of Sudomer on 25 March 1420. As noted above,this battle, which made Zizka a hero in the eyes of his followers, came about as the result of an attempt by the Royalists to intercept his retreat from Pilsen to Tabor. Zizka's force was tiny, only 400 strong and poorly armed. Since the skirmish at Nekmer Zizka had added five more wagons to his train, so that he now had twelve. He forded the Orava River near the village of Sudomer, and after heading southwards he soon saw the enemy approaching in two columns. Zizka had to find somewhere where the terrain would favour his defensive plans; this was not an easy proposition in the countryside of southern Bohemia, but to the south-east of Sudomer was an area of small lakes that had been dammed to make fishponds. Here Zizka arranged his position between two lakes, using the dam as a defence for one flank, and arranging his 12 wagons to cover the other flank and his rear. In the ensuing battle the losses were heavy on both sides, but the war wagons proved their worth. From these modest beginnings at Nekmer and Sudomer the use of war wagons developed into a distinct system of tactics.

Front end elevation of a Hussite war wagon, showing how the walls sloped outwards. An extra planked panel appears on the right of this view, i.e. the left side of the wagon, against the braces to the wheel hubs. This (below, left & centre) might be pierced with triangular weapon ports. It was a sturdier alternative to the roped plank shuttering (below, right) that could also be dropped over the side, simply as extra 'armour' against missile weapons. Note also the narrow lengthwise plank dropped to hang underneath the floor of the wagon. The access door/ramp is seen on the left of the drawing. (Hussite Museum, Tabor)

Construction

The famous war wagons of the Hussites were essentially heavy, four-wheeled farm carts to which extra planking had been fitted for protection. They were drawn by teams of four horses. The supply of horses was always a problem, both for pulling the wagons and as remounts for the mounted knights, so the Hussites were always on the look-out for fresh sources of horseflesh.

According to research and reconstructions made in the Czech Republic, the cross-section of a war wagon reveals that the long sides - 'walls' - sloped slightly outwards. This allowed an overlap beyond the wheels when the moveable panels of heavy wooden planking, secured by ropes, were dropped over the left side of the wagon as it went into battle. The wheels themselves were cushioned against damage by two slanting poles or braces on each side of the wagon, running from the wheel hubs to the top edge of the body. The basic design of the extra shuttering seems to have been simply a roped-together series of heavy planks which provided what would today be called 'spaced armour', to increase the protection against missile weapons for the infantry fighting from inside the wagon body. Other evidence suggests a heavier, continuous panel which was higher than the wagon body side, with triangular



loopholes for guns and perhaps crossbows to be shot from within (see Plate F). Another long protective board, capable of stopping small projectiles (and crawling enemies), could be lowered under the wagon between the wheels rather like a keel. Contemporary illustrations sometimes show this bottom board also pierced by triangular loopholes.

A narrow door in the right side of the body could be dropped as a ramp, allowing access for the Hussite 'crew'. Apart from the men and their weapons the equipment carried inside the wagon included a fixed wooden box filled with stones for throwing; and a number of axes, picks and shovels, for use when clearing the way on the march and strengthening the defensive position. The 'standard issue' for each wagon is listed as two axes, two spades, two pickaxes, two hoes, two shovels, lances with hooks, and a chain with a hook. Obviously, a wagon carrying artillery would also have had a supply of shot and powder on board. A bucket was slung between the wheels for fire-fighting or watering the horses; and the Hussite flag of the chalice would be flown proudly from each wagon.

Replica of a Hussite war wagon, showing the left or exposed side. In this case - as on the model at Visegrad Castle - the roped plank shuttering has been dropped over the side to provide extra protection for infantry fighting from inside the wagon body, as an alternative to the heavy loopholed extra side panel. (Hussite Museum, Tabor)

We are told that as many as 15 to 20 men could shelter within such a wagon, the division of weaponry usually being about six crossbowmen, two handgunners and the rest with polearms. A charming (but technically unconvincing) illustration from about 1472 shows a simple Hussite wagon with at least 18 heads and polearms popping up from behind the bulwarks. When Wagenburg tactics became systematized the men were divided into wagon quotas, stated variously as between ten and 20 per wagon. One specific ordinance required each wagon to have two drivers, two handgunners, six crossbowmen, 14 flailmen, four halberdiers and two pavisiers. The important point about all these puzzlingly long lists is that not all these troops would fight from inside the wagon. The drivers would tend to the horses, the pavisiers and presumably some crossbowmen would man their shields in gaps between the wagons, and flailmen would spread themselves around as needed to fend off direct assaults that reached the barricades. Only the gunners and some crossbowmen would need always to be inside the wagon so as to have cover for reloading, with some polearm men for close defence.

Each wagon was placed under its own commander, and then into a group of ten. A 'linesman' commanded files of 50 to 100 wagons. Infantry were also divided into units of 100 men. One captain was in overall command of the wagons, one in charge of the footsoldiers, and another led the mounted knights.

Detail of the tail of the reproduction war wagon. (Hussite Museum, Tabor)

Handguns and artillery

The wagons provided the fighting position; the firearms and other missile weapons wielded from inside them decided the outcome of battle. Although the Hussites were by no means the inventors of medieval artillery, their employment of firearms showed an understanding of how to use technology to its best effect. Handguns are well recorded, even though there were up to three or four times as many crossbows in action in a typical engagement.

The smallest of the guns used by the Hussites consisted of a short iron tube fixed to a long wooden shaft. The design is remarkably similar to contemporary Chinese firearms; the barrel was thicker at the chamber end, and had a slightly belled muzzle. These weapons are referred to in German sources as *Pfeifenbüchsen* or 'pipe guns', referring to the musical instrument rather than a tobacco pipe. The word is echoed in the Czech expression *pistala* or *pischtjala,* meaning a fife. (This may be the origin of the word pistol, now used universally for hand-held weapons.) Their described use by the Hussites was confirmed archaeologically by the discovery of one such weapon in 1898 during an excavation carried out at Tabor, the centre of the movement. The overall length of the Tabor gun is 42cm (16.5in) with a calibre of 17mm (0.7in); it has a socket rear extension of the barrel into which the wooden pole stock was inserted.

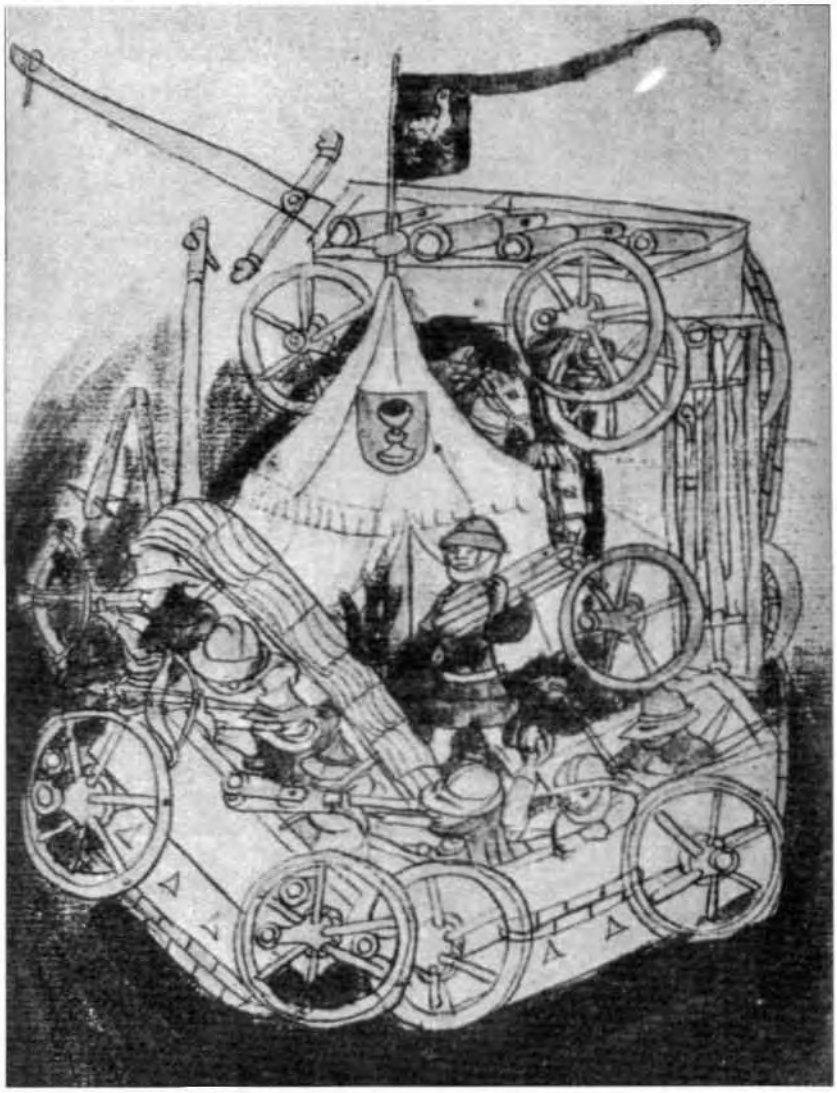
We may envisage the Hussite 'pipe guns' being used in a similar way to other handguns of the period, of which contemporary illustrations exist. These show the pole stock being held tightly under the left arm while the right hand applies a lighted match to the touch-hole. Much has been learned from tests carried out during the early 1980s on a reproduction of the Tannenberg gun. This weapon, almost identical to the Tabor find, was excavated from the site of Tannenberg Castle in Hesse and dates from before 1399. The experiments showed that greater accuracy could be obtained by cradling the gun under the right arm, but that it was more difficult to ignite the charge. The experimenters also discovered that there was no upward kick from the recoil, as the force was directed down the line of the stock. They also called into question the impression given by contemporary illustrations that the guns were fired using a heated wire. This proved to be impossible, so a smouldering match held rigid in some way is almost certainly indicated. (Anyway, the necessary provision of a brazier to reheat such wires defies common sense in an open field scenario.)

A contemporary illustration (see page 38) of a crusading army attacking a Hussite town shows a gunner using one of these weapons in the field, protected by a comrade holding a shield in front of him; the barrel of the gun is resting in the cut-out section intended for the knight's lance, and the pole stock rests on top of his right shoulder.

OPPOSITE Detail of the front of the reproduction war wagon, showing the box seat for the driver. (Hussite Museum, Tabor)

There were other ways, apart from the deep conical socket, in which the barrel and stock could be joined, and illustrations indicate that these types of gun may also have been present with the Hussite armies. One had the barrel secured by metal bands into a gutter carved into the broad forward end of a roughly shaped wooden stock, thus producing a more recognizable 'proto-musket' than the Tabor gun.

Longer-barrelled versions of pipe guns feature in certain medieval illustrations showing the use of a two-legged support under the barrel. As the weight increased so there was a greater need to strengthen the junction of barrel and stock (two metal bands replaced a single one), and for the gunner to rest the barrel to take aim. A simple projection was forged under the barrel, which could be hooked over the front edge of a wall or other rest to prevent any backwards recoil. Hence the name *Hakenbüchsen* or 'hook guns', which entered the English language as 'haquebut' or 'hackbut', and eventually 'harquebus' for any match-fired musket. In time heavier versions of *Hakenbüchsen* were developed, with calibres of between 20mm and 30mm (0.78in to 1.2in). One further variation on the hackbut that may have been used by the Hussites was the type having an elongated metal rod in place of a separate wooden stock.



As the calibre of handguns increased so it became less practical for them to be held in the arms, even with the support of the side of a wagon. One alternative was to mount the gun on a form of wooden stand, thus producing the *tarasnice* (German *Tarasbüchse),* which was the Hussite 'field gun' - wheeled versions appeared from about 1430. The *tarasnice* would be located in between the wagons, protected by shields. A modern reproduction in the Hussite Museum in Tabor shows the *tarasnice* as a cruder and smaller version of the weapon later known as the *arquebus à croc.* The combined stock and barrel resemble a large *Hakenbüchse.* They are attached to a simple wooden two-legged trestle at

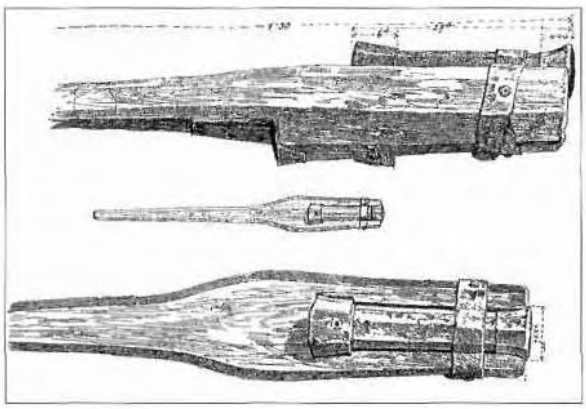
OPPOSITE Drawing of a surviving Hussite gun, in this case with the short iron barrel mounted within a gutter on the crude, 'paddle-shaped' wooden stock and secured with an iron band. The barrel, which appears to be hexagonal, is shown as 29cm long (11.4in); 7cm (2.75in) wide at the widest swell of the belled muzzle; and of 2.5cm (0.98in) calibre.

OPPOSITE This is one of the most important contemporary drawings of a Hussite *Wagenburg,* showing four wagons linked for the defence of a tented camp, inside which the unhitched horses are gathered. The tent flies the goose flag of the Hussites, and is decorated with the chalice motif. Despite the unrealistic perspective many details can be made out. In the two foreground vehicles, troops wearing kettle hats, hoods, and some ringmail are armed with spiked flails, crossbows, and a short-barrelled handgun on a wooden stock; note, too, that one is throwing stones. There are no apparent extra plank shutters over the wheels and no raised panels; the soldiers are protected only by the wagon body. Note the bottom boards, however, lowered between the wheels and pierced by triangular apertures. Below this at left, and at upper right, there are strips of 'brickwork' below the wheels; could these represent stacked turfs? We read that ditches and earth banks were dug to protect the outside of wagon forts. At right, the wagon shown vertical is loaded with swords and a handgun; and the background wagon holds four heavy guns, apparently ranged along the body for use rather than simply stacked for transport. (Reproduced from Toman, *Husitske valecnictvi,* Prague, 1898)

two points: the forward point is pivoted, and at the rear the elevation can be controlled and fixed by a pin through an arc pierced with a series of holes. We know that when the 16th century versions were fired one of the two members of the gun team leaned all his weight against the frame to absorb the recoil, so we may envisage a similar process within the walls of the Wagenburg.

The Hussites' heavy artillery came in the form of the even larger *houfnice* (German *Karrenbüchse)* which is usually translated as 'howitzer'; it comes from the word *houf* 'for a crowd, to indicate its use against advancing troops. It had a short, wide barrel of hoop-and-stave construction, strengthened by encircling metal bands that also secured it to the heavy wooden mount. This was placed upon an axle and wheels from a cart. There is some controversy over the date of introduction of the *houfnice.* Its first unequivocal mention in a chronicle dates from the 1440s, but a later chronicler asserts that *houfnice* provided part of the devastating artillery barrage that won the battle of Usti in 1426. There is an excellent depiction of a *houfnice* on a drawing of a Hussite battle now in the Louvre, Paris (see page 43); this has been dated to 1430, so the use of *houfnice* at Usti and later battles seems credible.

The *houfnice,* for all its size, still represents a medieval version of what might be termed 'field artillery'; but descriptions of the Hussite Wars show that both sides used siege weapons when the occasion demanded. A Hussite army might therefore have included a siege train complete with bombards, which were in the process of transforming siege warfare by their unique ability to send projectiles into the lower courses of castle walls at right angles. The Hussite Wars span the period between Henry V's siege of Harfleur in 1415 and its recapture in 1449, so Hussite siege operations may well have reflected the great changes that took place between these two dates. The first siege of Harfleur in 1415 ended after three months with the garrison starved - rather than battered - into submission. Early 15th century bombards could only operate on a powder-to-projectile weight ratio of 1:13, lest the barrel burst. Later in the century this ratio could be increased to 1:2, which greatly enhanced the hitting power. When the French retook Harfleur in 1449 their artillery-based siege took only 16 days. The trebuchet, which had often matched the stone-firing bombard in its destructive capacity, was finally obsolete as a wall-breaker.

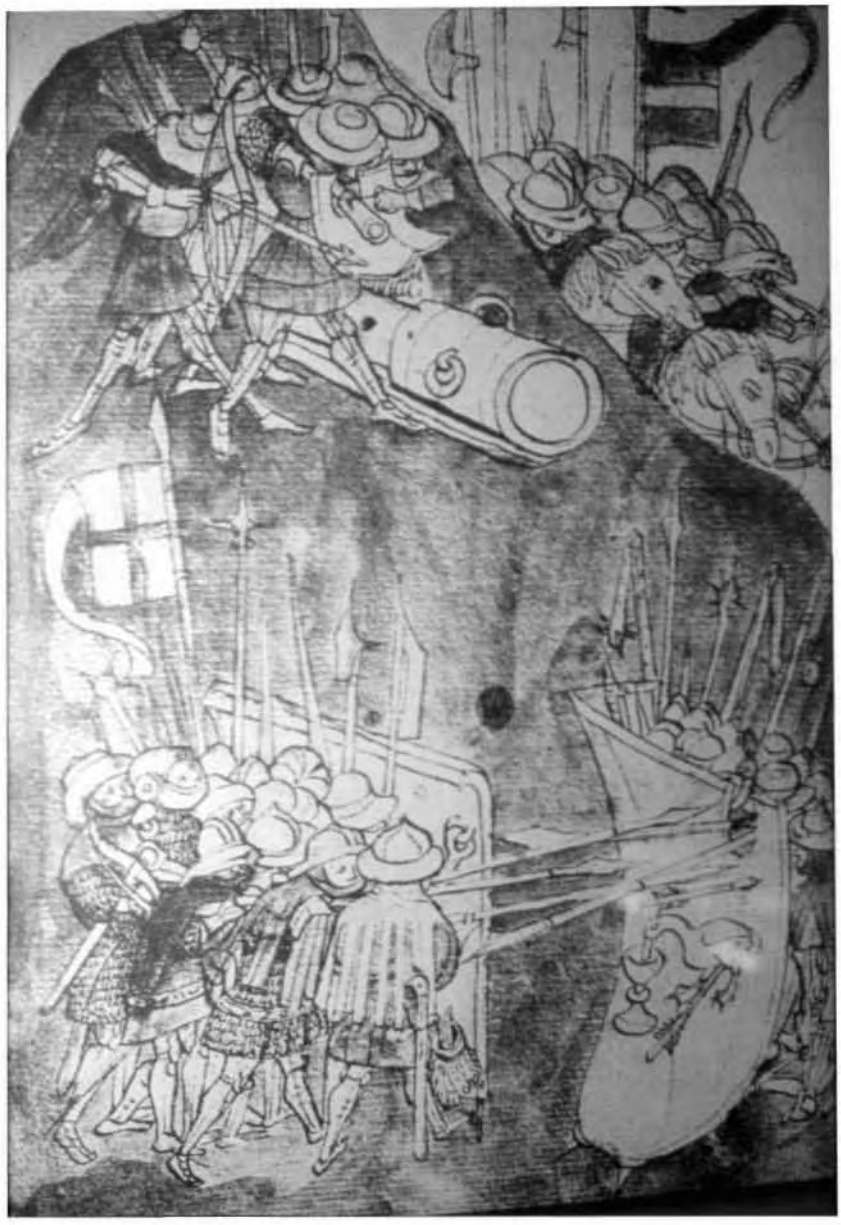


Wagenburg tactics

The experience of the battles of Nekmer and Sudomer, described above, eventually resulted in the development of the combined use of wagons and artillery as a practised and efficient system of defensive warfare understood throughout the Hussite armies. In effect, Zizka's army could undertake a campaign secure in the knowledge that they could place a mobile artillery fort almost anywhere they wished, at short notice.

The skirmish at Nekmer in 1419 had involved only seven wagons; but in the fully developed version of this tactical formation there might be

up to 180 war wagons, and about 35 of the larger guns. If the topography of the battlefield did not require a wagon formation in which all fronts had to be covered, then the fire-power could be concentrated on a narrower area, producing, say, one large gun and about five smaller ones plus crossbows along a front of 20 feet. The battle of Malesov, where steep slopes and a river provided useful terrain, is a good example of this flexibility.



The individual wagons moved along in columns until, at a prearranged position, they were wheeled into a defensive perimeter and anchored to each other by chains. Signal flags raised on the leading wagon and the last wagon of each file controlled the manoeuvres. The wagon line moved ahead in four columns: two outer ones *(krajni)* and two inner ones *(placni).* The files of the *krajni* were longer in the front and rear than those of the *placni,* and these overlapping lines of wagons were called *okridji* (flanks). By 'wrapping around', they allowed a quicker bonding together of the defensive formation to make a closed perimeter.

When this manoeuvre was completed the horses were unharnessed, and the wagon shafts were either removed altogether, raised vertically, or placed against the preceding wagon. The wagons in the line were then firmly chained together and the protective panels released. Quite often a ditch was dug in front of the wagons and the earth spoil was thrown against the wheels so that they were partially covered. The horses remained close to the wagons so that they could be hitched up again rapidly when needed. They were in the safekeeping of the drivers and the shield bearers, whose shields covered the narrow spaces between the wagons. On each wagon and in the gaps between stood flailmen and soldiers armed with long hooked bills as well as a number

OPPOSITE This 15th century drawing shows the siege of a Hussite town by a crusading army (left). Notable details include the bombard at top left and, standing over it, a hand-gunner aiming through the cut-out corner of a shield held by a comrade. Note too that the longbow certainly had not been displaced by the crossbow. At bottom left a group of crusaders armed with halberds, spears and crossbows shelter behind a large propped mantlet shield; at least one wears beneath his *chapel-de-fer* helmet a hooded cape cut into very long lappets. Opposite them at bottom right is a pavise decorated with the Hussite emblems; in this case the goose is shown actually drinking from the chalice. (Hussite Museum, Tabor)

of handgunners, crossbowmen and simple archers. Behind the wagons, columns of armed men were drawn up ready to relieve the wagon fighters in rotation.

Finally, within the wagon circle a reserve force waited ready to make a sortie as soon as the repulse of the enemy provided the opportunity; this was where the mounted Czech nobility would wait for their moment of glory. There does not seem to have been any shortage of opportunity for mounted knights during Hussite battles. In most cases the defence of the Wagenburg was only one phase of the overall series of events - a situation illustrated by a picture dating from 1430-40, where the dominant arm is cavalry.

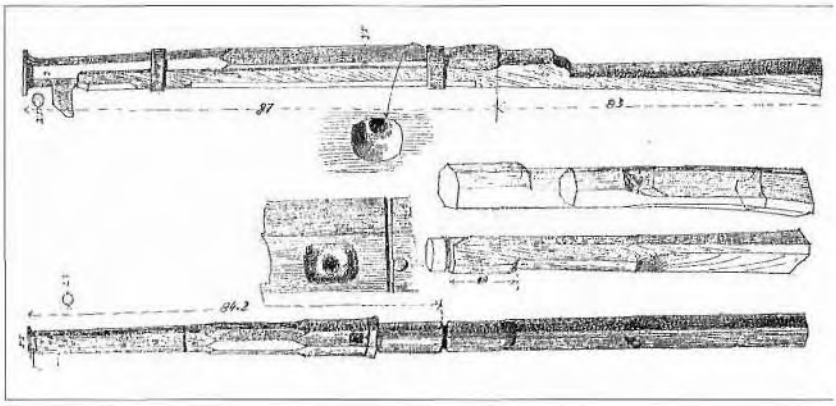
Some references, however, go much further than this, and paint a picture of Wagenburg tactics almost as the medieval equivalent of tank warfare. Aeneas Silvianus Piccolomini, who later became Pope Pius II, begins his account with a straightforward description similar to that above, but then tells us:

> 'When a battle was about to begin, the drivers, at a signal from their captain, quickly encircled a part of the enemy army and formed an enclosure with their vehicles. Then their enemies, squeezed between the wagons and cut off from their comrades, fell victim either to the swords of the foot troops or the missiles of the men and women who attacked them from above from the wagons. The mounted troops fought outside the wagon stronghold, but moved back into it whenever the enemy threatened to overpower them, and they then fought dismounted as if from the walls of a fortified city. In this way they fought many battles and gained as many victories as possible, because the neighbouring peoples were not familiar with such methods. Bohemia, with its broad and level fields, offers good opportunities to align carts and wagons, to spread them apart and to bring them together again.'

The most troublesome passage in this account is 'encircled a part of the enemy army', which sounds like an exaggeration of what was clearly a defensive manoeuvre. In another passage Piccolomini expands upon the theme:

> 'As soon as the battle signal was given the drivers developed their movements against the enemy according to certain figures or letters that had previously been indicated to them, and formed alleys which - well known to trained Taborites - became a hopeless labyrinth for the enemy, from which he could find no exit and in which he was caught as in a net. When the enemies were broken up, cut off and isolated in this manner, the foot troops easily completed their full defeat with their swords and flails, or the enemy was overcome by the marksmen standing on

Two much more developed 'hook guns', sketched from the left side (top example) and above (bottom example). The upper example shows two metal bands securing the barrel to the much more carefully shaped wooden stock, producing what is recognizable as a sort of 'proto-musket'; the overall length is 170cm (5ft 7in) from the muzzle to the end of the stock, the calibre 2.5cm (0.98in). The bottom example is of very similar size, with a more elaborately cast stepped, multi-faceted section at the breech. (Hussite Museum, Tabor)



their wagons. Ziska's army was like a many-armed monster which unexpectedly and quickly seizes its prey, squeezes it to death and swallows up its pieces. If individuals succeeded in escaping from the wagon maze they fell into the hands of the horsemen drawn up outside and were killed there.'

The implication is that the Wagenburg was being used offensively rather than defensively. This passage clearly describes not a continuous perimeter, but lines or groups of wagons drawn up in a separated but mutually supporting formation - one almost hears an echo of Napoleon's cavalry riding helplessly through the chequerboard of British squares at Waterloo. This is intriguing, if difficult to understand; but even if we disregard any implication of rapid aggressive movement, the ability of a Wagenburg to provide an effective defence against mounted knights comes over with absolute clarity.

The *Wagenburg* in action

The battle of Domazlice, which provided almost the only combat during the Fifth Crusade in 1431, is an interesting example of an engagement fought long after the Hussite Wagenburg had ceased to be a 'secret weapon'. The crusading army that laid siege to the town of Domazlice had war wagons of their own. However, by the time the three columns of Hussites approached to raise the siege the crusaders had made few preparations to profit from the means at their disposal. The outcome of the battle showed that war wagons mishandled by incompetent leaders could achieve nothing.

The crusader commander, Frederick of Brandenburg, did order the troops under his direct command to establish a Wagenburg on a hill overlooking the road from Domazlice to Kdyne; but this was a precautionary measure, to provide a screen for any retreat he might order. His intention does not seem to have been conveyed adequately to Cardinal Cesarini and the other crusader leaders. They were stationed elsewhere, and from their vantage points the most obvious movement within the crusader ranks did not appear to be the planting of a position for determined defence, but a rapid withdrawal towards the border passes by supply wagons holding the baggage. When the Hussites advanced, singing lustily, the pace of the wagons hastened noticeably; and from Cesarini's hill the movement looked like flight, treason or both. Soon the supposed retreat became a real one, and unstoppable. Nearer to the border forest the crusader commanders made an attempt to halt the rout by constructing a Wagenburg, but the Hussites were too close behind them and soon penetrated this position. Abandoned baggage and equipment lay everywhere, providing them with *the* greatest booty taken during the entire war (the trophies even included Cesarini's cardinal's hat).

At Domazlice the Hussites had demonstrated that one of the most effective ways of dealing with a Wagenburg was to prevent it being erected in the first place. The second way was to render it redundant, and this is what happened at the battle of Lipany in 1434, when an alliance of the Hussite brotherhoods was defeated by another alliance of Czech nobles and Prague townsmen. The brotherhoods had taken up a position on the low hill of Lipska Hora, which gave them some advantage of height over the surrounding plain. Their opponents (the

Surviving barrel on a reconstruction of the two-legged wooden stand of a *tarasnIce* or trestle gun, which provided the Hussite 'field artillery' - wheeled versions appeared from about 1430. The combined stock and barrel resemble a large 'hook gun', but it lacks the under-muzzle rampart hook. A similar cast extension under the breech pivots between wooden cheek pieces mounted on the trestle, and elevation is controlled by the pin and pierced arc through the stock. To traverse the gun one of the crew had to simply pick up the rear of the plank trestle and move it sideways. (Hussite Museum, Tabor)

OPPOSITE Typical of the Hussites' heavy artillery was the *houfnice.* There is some controversy over its date of introduction; the first unequivocal mention in a chronicle dates from the 1440s, but a later chronicler asserts that *houfnice* provided part of the devastating artillery barrage that won the battle of Usti in 1426. (Hussite Museum, Tabor)

A 15th century footsoldier armed with a handgun, firing it with the pole or rod stock held tightly under the left arm while the right hand applies the lighted match.

'lords'), who had superior numbers, calmly ignored this and began to move their war wagons up the hill in a long formation; in the end this hemmed the brotherhoods inside their camp. The dense smoke that drifted across the battlefield from both sides' artillery helped to mask this manoeuvre. It was an operation similar to that envisaged as taking place by Piccolomini in the passage quoted above, but conducted at a believable speed. Then the lords were observed to have ceased firing and to be descending the hill again. The brotherhoods concluded that they were in retreat, and began to break ranks to pursue them. The army of the lords was indeed moving down the hill, but very slowly, and keeping the line of wagons intact. The brotherhood knights and foot-soldiers poured down into what they thought was a disordered wagon formation, and became trapped, their footsoldiers being trampled to death or cut down by the nobles' horsemen. The lords then made a counter-attack back up the hill towards the now genuinely disordered Wagenburg of the brotherhoods. The brotherhood army was crushed and its leaders killed. It was at Lipany that the two halves of the sundered Hussite movement began to destroy each other - a tragic end to the once glorious story of Jan Zizka's war wagons.

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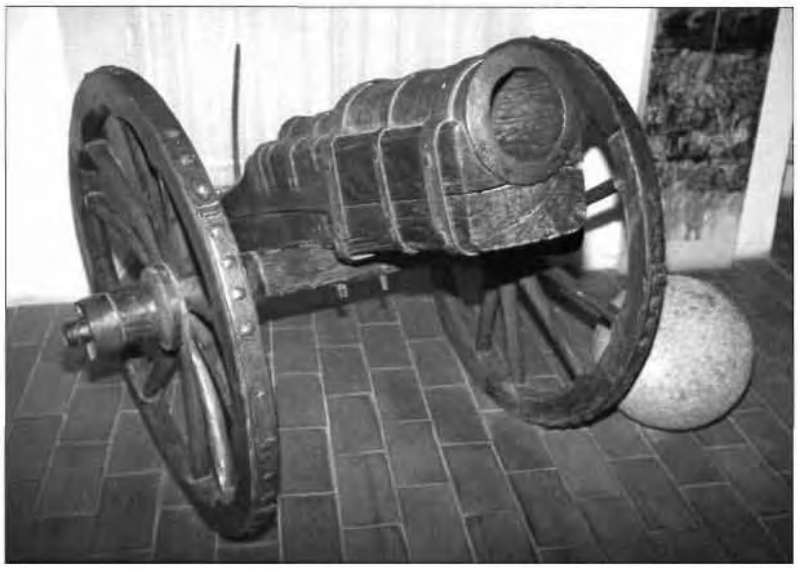

This fine exterior wall painting at the Town Hall of Pisek shows an impression of the Hussite army under Prokop the Great beneath the walls of the town.

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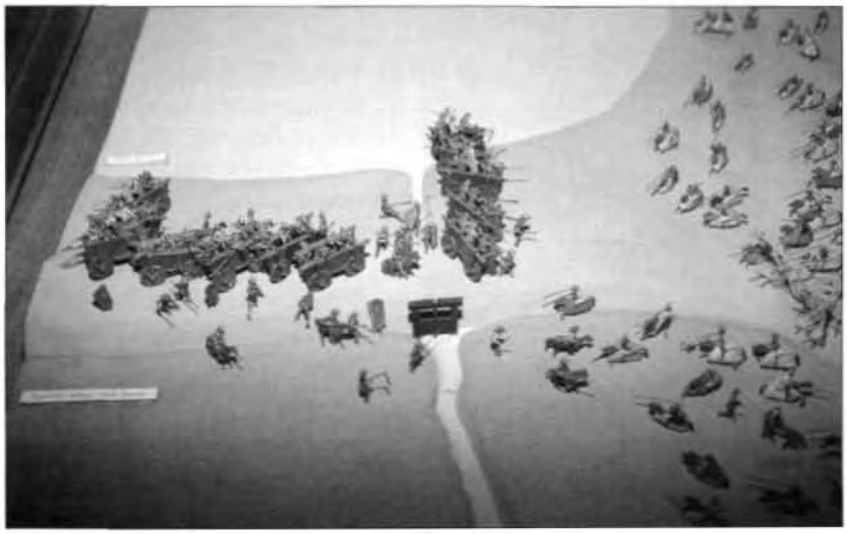
OPPOSITE This drawing of 1430, of which the original is in the Louvre, shows a battle with the Hussites. Despite its lack of clarity interesting points can be made out: every weapon from a knightly lance to a crude wooden club seems to be in use, including a longbow and several falchions. More importantly, at top left of this detail is a Hussite cannon of the ***houfnice*** type, mounted on a field carriage fitted with a clearly illustrated elevating mechanism. **(Hussite Museum, Tabor)**



A simple model in the Hussite Museum shows the use of Zizka's 12 war wagons at the battle of Sudomer, 1420. He deployed between two small lakes that had been dammed to make fishponds, arranging his wagons on the bank to cover his front, rear and one flank.

The defining moment of the battle of Domazlice on 14 August 1431 was the panic retreat of the crusaders. This detail from the bas-relief on the door of the Zizka Memorial in Prague commemorates the flight from the battlefield of one of their commanders, Cardinal Cesarini, who lost his cardinal's hat in the process.

THE PLATES

Specific contemporary or near-contemporary images of the Hussites are rare; however, in these plates we have followed what evidence there is, together with primary sources for typical costume and armour styles of Germanic central Europe in the first third of the 15th century. (The author acknowledges the valued assistance of Gerry Embleton of Time Machine SA, Prêles, Switzerland.) In both clothing and armour design change was generally slow except among the elite aristocracy; a range of styles associated with dates from the late 14th century to the 1430s is realistic. Research has shown that the colours achievable by medieval dyers were brighter and more varied than was once assumed; we have tried to reflect both this, and the recorded fact that some Hussite factions favoured subdued clothing on religious grounds. At this date the knightly elite of Europe still looked to Italy as the major supplier of plate armours, although some specifically German items are illustrated.

A1: Jan Zizka, c1420

The first and greatest leader of the Hussites is shown at the head of his army in the years preceding the siege of Rabi, so he still has one good eye; he was depicted with a cloth band covering the empty socket. He is never depicted in full contemporary armour - probably to show his close association with the egalitarian, reformist movement he led - and we follow this tradition here. He is shown wearing only a long-sleeved mail shirt, a short breastplate (a 'globous' shape would be typical of the region and period), and a caped mail hood thrown back. At least one early image shows him wearing a long black tunic or coat. His favourite weapon was reportedly the flanged mace, and we show the simple design of the reconstruction now in the Hussite Museum at Tabor.

A2: Hussite peasant soldier with war flail

The protective cap, easily mistaken in a couple of contemporary images for the helmet of iron scales which was also current, appears to be made of coiled and tied rope. The only other protection is the plate armour seen at the upper arms - presumably the spoils of battle. Note the sheepskin jerkin with 'cap' sleeves worn over his tunic; and the slung flask. The single-leg hose are rolled down and tied below the knee; this man has lost one of his simple 'bag-shaped' shoes. Contemporary images and accounts indicate the popularity of the war flail among Hussite infantry.

A3: Hussite spearman

A more fully equipped soldier, wearing the kettle hat or *chapel-de-fer* that was widely used by central and eastern European infantry at this date, in many differing shapes. His body armour consists of a mail 'standard' or collar fastened

ABOVE **Hussite soldiers, from an old stone relief formerly on a house wall in Tabor; although naif and badly weathered, the carving shows identifiable details. The men wear kettle helmets, and carry (left to right) a flail, a crossbow, possibly a handgun, and a large 'heater' shield. (Hussite Museum, Tabor)**

ABOVE RIGHT **Another panel from the same source. Although many features have weathered away, these men are clearly armed with an axe or halberd, a flail and a crossbow. The tall, brimless shape of these helmets is in intriguing contrast to the matching carving. Could these represent bascinets? (Hussite Museum, Tabor)**

OPPOSITE **Jan Zizka leading the Hussites, from a medieval manuscript. Note that Zizka (centre, on white horse) is shown as a blind man with both eyes bandaged; his hat, tunic and boots are shown as black, his caped hood as steel-blue, his horse harness as red leather. The column march under a banner of a black chalice on red, carried by a bearer in a red hood and green tunic. All the other figures are shown in armour, though the front spearman has a brownish garment, apparently buttoned, over his torso. The polearms are shown as a hammer, a halberd, a spear, and a mass of war flails. A priest carrying the Sacred Host walks in front of the array. (National Library, Prague)**

by buckled straps at the back; a long mail shirt with broad, three-quarter sleeves; a cuirass, the breastplate showing one of several typically German 'box' shapes, with a more or less horizontal 'keel' above the indented belly; and a deep tonlet of many hoops over the belly and thighs. Again, the single-leg hose are rolled down. His main weapon is a sturdy boar spear, and his sidearm is a falchion.

The soldiers are led in their battle hymn by a priest, who has armed himself with a simple wood-axe. Above them flutters the Hussite flag with its chalice motif.

B1: Sigismund of Luxembourg, 1420

Sigismund, who was crowned King of Bohemia in July 1420, was the most significant opponent of the Hussite movement, and was effectively the commander of the crusading forces throughout the wars. As simultaneously King of Hungary and Holy Roman Emperor he was entitled to several different heraldic coats of arms, but is depicted here displaying only the royal arms of Bohemia. Arbitrarily, we illustrate armour typical of the European aristocracy in the early years of the century. His 'houndskull' bascinet is worn attached by staples to a deep, padded mail aventail sweeping down over the shoulders. Plate armour of the finest quality, probably made in Milan and decorated with gilded details, covers his arms and legs except for the rear of the thighs, which would be protected with fabric-covered mail. Rondels hanging from straps protect his mail-clad armpits; his gauntlets are of the typical 'hourglass' shape of the period, and his shoes are armoured sabatons. His cuirass is covered by a tight-fitting heraldic 'coat armour', though the dagged edge of the mail haubergeon worn under it can be seen at the groin. He is illustrated as if ready for foot combat, having discarded the scabbard belt for his sword.

B2: Hyneck Krusina of Lichtenburg

One of the most important of the early Hussite leaders, Krusina first led the Orebite troops to Prague and was then appointed captain-general of that city's forces. In 1420 he led the attack on the fortress of Vysehrad at Prague. He is shown here mounted for battle, wearing plate armour essentially similar to that of figure B1, with his sword slung at his left hip and carrying a war lance. His heraldic arms are displayed on his coat armour, shield, and horse caparison.

C1: Cenek of Wartenburg

This plate depicts three leaders of the crusader armies which opposed the Hussites; little is known of their actual appearance, so we take this opportunity to show variations on the typical armour and display of the early 15th century.

Cenek of Wartenburg was the chief advisor to the widow of King Wenceslas, although he later changed sides more than once. He came to prominence by his defence of Prague against the Hussites, when he reinforced the garrison of the royal castle on Hradcany Hill by hiring in German mercenaries. We illustrate an old-fashioned set of harness dating from the late 14th century, partly based upon the effigy of the knight Hans Haberkon in Mainz Cathedral. The bascinet is fitted with a German *Klappvisier* - a visor attached by a bar and hinge fitting on the brow rather than by swivels at each side. The 'box' shape of his cuirass *(Kastenbrust)* can just be made out under his coat armour, which is halved in his heraldic colours. Below its edge can be seen an eastern European skirt of scale armour, over mail. His arms and lower legs are protected by full plate, but his thighs still show an older style of leather or fabric defences with internal scales. His weapons are a hand-and-a-half sword, and a 'ballock' dagger supported by a richly plated belt worn low on the hips.

C2: Bohuslav of Svamberg

In December 1419, at the head of a fairly strong army, Bohuslav of Svamberg (Schwanenberg) tried to trap Zizka while the latter was laying siege to the Royalist castle of Nekmer a little to the north of Pilsen. Confident of his superiority, Bohuslav attacked, but was beaten back with heavy losses by Zizka's small force, which fought from behind seven war wagons drawn up between two lakes and armed with artillery.

In the first ten years of the century tomb effigies from all over Europe show the use of bascinets in conjunction with an attached plate defence for the lower face and throat. This bevor was at first worn over the mail aventail; later it grew more massive, and seems to have replaced it, as a separate neck piece seated on the shoulders within which the overlapped bascinet could still move to some extent. Helmet and bevor then merged; and surviving examples of this 'great bascinet' have plates projecting so low at front and back that they clearly could not move with the head - any slight degree of movement must presumably have been within the helmet. We illustrate here a 'houndskull' form of great bascinet of c.1400, believed to be of north Italian make; it has holes around the edge for attachment of a lining or an aventail. We show Bohuslav wearing not tight-fitting coat armour, but a loosely cut surcoat displaying his heraldic arms. Such garments were slit up the sides for access to the sword and dagger.

C3: Ulrich of Rosenburg

At the time of the first crusade Ulrich was King Sigismund's staunchest supporter in Bohemia. His career spanned the whole course of the Hussite Wars, and he is known to have fought at Lipany in 1434. We have therefore chosen to show him in the very latest Italian style of full plate 'white' armour, worn without any external garment (his arms of a rose are shown on a banner). His helmet is a very early form of closed armet, based on the Milanese example of c.1420 from the Churburg armoury. Its two large face pieces hinge at the temples, the right piece closing over the edge of the left; there is evidence that a separate visor could also be attached, as well as a shallow aventail. Ulrich is depicted wearing a c.1425 Milanese armour also from Churburg; it has large, asymmetric shoulder defences, a plackart belly plate overlapping the breastplate, and a lance rest on the right breast.

D: HUSSITE INFANTRY

D1: Crossbowman

This man is spanning his crossbow behind a pavise, the large shield which was carried forward by a second man and propped up to give cover in the battle line. The bow is of the early type, with a massive stave of composite horn and sinew construction covered with waterproofed material. Its mounting on the simple wooden tiller was reinforced by thick lashings; note, too, the heavy construction of the cord, from several separate strings 'whipped' together. The mechanism was re-cocked by bracing a foot in the iron stirrup and pulling the string back by means of a double belt hook, to engage with a pivoting nut secured by the end of the trigger bar. The bowman holds a short, heavy bolt ready in his mouth; fletchings were of leather, heavy paper, or even thin wood, and bolts were carried heads-up in an open box quiver, often shown covered with unshaven hide. The bowman wears a cap-shaped helmet constructed of many iron scales, over a caped mail coif. His hose legs are only laced to his doublet skirt at a few places, leaving his long, loose shirt visible; note that his doublet sleeves are also laced on with 'points'. His only armour is a breastplate, secured by crossed straps behind. His sidearm is a broad, heavy single-edged falchion.

D2: Crossbowman

The shooting bowman wears one of the many types of 'kettle' helmet, this one with a round skull and median ridge, and a deep brim cut with two eye slits. The typical caped hood is often shown with the deep edge cut into a fringe of long lappets. His armour is limited to a mail shirt and a pair of plate poleyns protecting his knees.

D3: Billman

More heavily armoured for hand-to-hand combat, this infantryman has an old bascinet and aventail, but has discarded the visor. He has a *Kastenbrust* cuirass with rondels hanging at the armpits, and plate gauntlets. Note the buttoned opening at the front of his tunic skirt.

D4: 'Morning star' man

Armed with the crude but effective *Morgenstern,* this soldier has yet another style of the ubiquitous kettle helmet, with both the apex of the skull and the front of the brim swept into graceful points. His torso is also well protected, with a typically high-waisted and 'globous' breastplate worn over a sleeveless mail shirt extending to cover the groin.

E: HUSSITE FIREARMS

E1: Handgunner

The weapon is based on the small Tabor gun' found at the site of the Hussite headquarters; the bore of its hexagonal, stepped barrel is just over a foot long and of just over 0.7in (17mm) calibre. The simple pole stock, which fitted into a socket cast into the rear of the barrel, was held tightly under the arm, and the powder in the touch-hole was set off with a smouldering match. Larger handguns are depicted with a two-man crew. We have given our gunner plate leg defences, a mail shirt, and a padded aketon - one of the many types of multi-layered or quilted 'soft armour' which were worn all over Europe, both in place of and in combination with mail and brigandine defences.

E2: Trestle gun

This *tarasnice* is taken from a surviving barrel on a reconstructed trestle mount in the Hussite Museum at Tabor; it roughly resembles a large 'hook gun'. Such weapons represented the Hussite 'field artillery'; they were located in between the wagons of a Wagenberg and their crews protected by shields - mantlets or pavises. Such guns could only be traversed by lifting and moving the rear of the trestle, but elevation could be adjusted by the rear arc and pin passing through the pierced stock, and the front attachment where a cast extension from the barrel was pivoted to a wooden support.

E3: Cannon

The *houfnice* was the Hussite heavy artillery, named from the word *houf* meaning 'crowd', suggesting its use against massed enemies, presumably with a load of what would later be called grapeshot. The barrel was of consolidated hoop-and-stave construction reinforced by external bands; it was mounted on a heavy wooden carriage and the axle and wheels from a cart.

F: War wagon

For clarity we have shown only a few of the crossbowmen and hook-gunners inside; in reality at least ten soldiers could man one of these large converted farm carts. Note the built-in box holding stones for throwing in hand-to-hand combat. We see the wagon from the front; note the braces leading from the axle hubs up to the body rim, to support the slanting protective planking dropped down on the left side. This has triangular loopholes for the 'hook guns';

another length of planking was slung beneath the wagon bed, and dropped in battle to block the space between the wheels - this too is sometimes shown loopholed, as is the wagon body itself. Access is by the ramped door on the right side. Flags were commonly displayed, here the goose and chalice motif of Jan Hus. To represent the polearm infantry who rode in the wagons and fought around them in battle, we illustrate a man and a woman carrying flails.

G1: Cardinal Henry Beaufort, Bishop of Winchester

The religious aspect of the Hussite Wars attracted crusaders from the upper echelons of European ecclesiastical society. This English prelate fought at the siege of Stribro in 1427 - something of a disaster, since the crusaders fled before the Czechs arrived, and suffered losses only when the Hussites caught up with them near Tachov on 4 August. Cardinal Henry, in furious contempt at this fiasco, tore the imperial standard in pieces. We reconstruct him wearing a Milanese plate armour of c1420, largely after those from the contemporary Churburg armoury. The great bascinet, with globular skull and visor, has its back and side surfaces drawn down deeply in a single piece, with a riveted bevor under a deep riveted gorget plate at the front. It resembles a number of contemporary effigies from all over Europe; however, the surviving example copied is in fact from Pamplona, Spain, c1425. The shape of the heraldic tabard that he wears over his armour is from the effigy of the Earl of Arundel, made c1435; note that it is slit deeply up both sides to accommodate his sidearms. The charges are a tentative reconstruction of how it might have appeared, based on Henry's coat of arms: those of Beaufort, showing his royal kinship, impaled with the See of Winchester. This man of God is armed for foot combat with a contemporary war hammer.

G2: Sigismund Korybutas

The Hussites chose Grand Duke Vytautas of Lithuania to be their king in place of Sigismund of Bohemia. To this purpose, he sent as his representative to Bohemia his nephew Sigismund Korybut (Korybutas), who presented himself as the regent of the postulated king. Although much of western Russia had recently been annexed into the combined kingdom and grand duchy of Poland-Lithuania, and the grand dukes' armies became predominantly Russian, the elite aristocratic cavalry certainly remained part of the Western tradition and continued to use European armour. We choose to show a rather old fashioned bascinet with a globular *Klappvisier,* worn with the almost universal Italian-made plate limb armour and a brigandine over a mail haubergeon. Only the shape of the shield is strikingly un-Western, being typical of Poland, Hungary and the Balkans. It bears the arms of Lithuania - the armoured rider known as the *Pogon.*

The background figure represents Cardinal Cesarini.

H1: Prokop the Great

We reconstruct this aggressive Hussite leader, killed at the battle of Lipany in 1434, armed with a battleaxe and wearing conventional armour of the period. He has removed his bascinet and its attached aventail, showing the thick quilted padding inside the latter. An early painting seems to show coat armour of black with a broad red stripe, and the golden chalice motif on the chest in place of any personal heraldic arms.

H2-H6: Hussite flags

The flags of the Hussites are almost invariably shown as bearing the chalice motif, the only exception or addition being the white goose, in reference to the word *hus.* In some cases the chalice is painted in simple silhouette, in others more elaborately, shaded and highlighted to give it a three-dimensional appearance. Some flags seem to have had additional outlining in gold; and a version of H2 bears the gold lettering VERITAS VINCIT- Truth Conquers' - on the streamer section. Red is the most commonly depicted ground colour, but all the colour combinations shown here have been suggested.

Two Hussites sheltering behind a pavise, from a contemporary drawing. Note the kettle hat at left, swept into points at the apex and the front of the brim - see Plate D4. His companion has a cervelière or perhaps a simple sallet with additional rondel ear pieces. The body armour, if any, is unclear. (Hussite Museum, Tabor)

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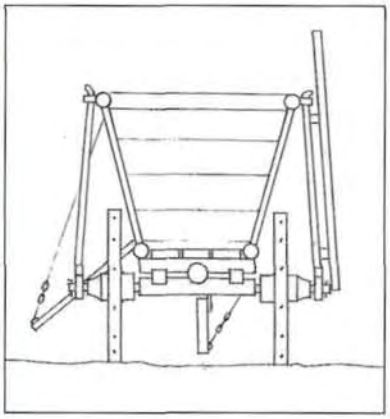

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